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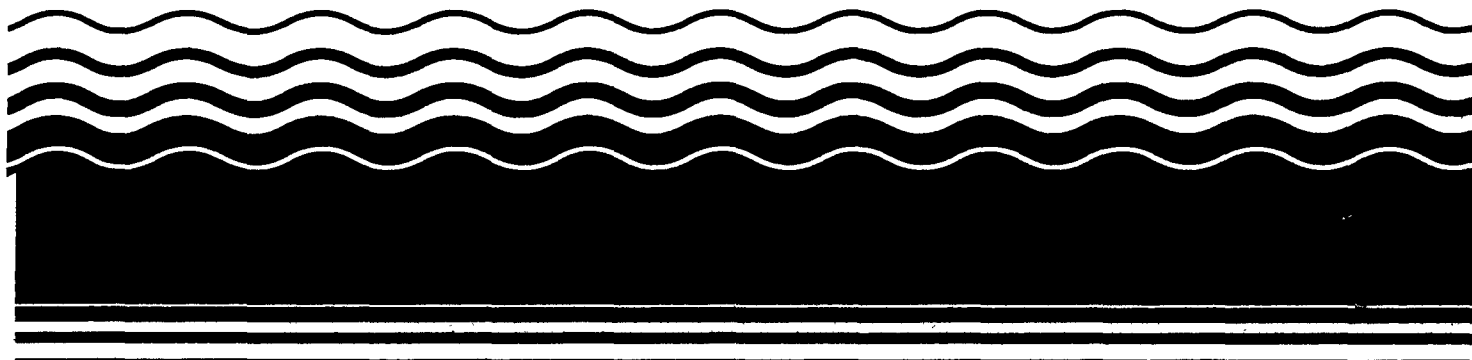
Office of
Solid Waste and
Emergency Response

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December 1994

Superfund



U.S. EPA Region VII Inland Area Contingency Plan



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**U.S. EPA REGION VII
AREA CONTINGENCY PLAN**

**United States Environmental Protection Agency
Region VII - Emergency Planning & Response Branch
25 Funston Road
Kansas City, Kansas 66115**

December 30, 1994

**Revision 1
December, 1994**

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII

OIL POLLUTION ACT OF 1990

AREA CONTINGENCY PLAN

**To Report Spills
Call:**

**National Response Center
(800) 424-8802
(24 Hours)**

**National Response Center
United States Coast Guard Headquarters
Washington, DC**

Regional Response Centers:

**United States Environmental Protection Agency
Region VII
Emergency Response Branch
25 Funston Rd.
Kansas City, KS 66115
Emergency Response 24-Hour Emergency Number
(913) 236-3778**

**United States Coast Guard
Second Coast Guard District Office
1222 Spruce Street
St. Louis, MO 63103-2832
Emergency Response 24-Hour Emergency Number
(314) 539-3706**

RETURN RECEIPT

The value of this document is limited by the fact that with the passage of time, certain pages will become obsolete and therefore should be replaced. Also, new information will be developed that will add to the usefulness of this contingency plan.

In order to keep your copy current, we will periodically add or revise pages and distribute them to you. To indicate your interest in that effort, we ask that you mail us the following form.

This is to acknowledge receipt of a copy of the 1994 USEPA Region VII Area Contingency Plan. I would like to have revised material on this subject sent to me at the address shown.

NAME: _____

TITLE: _____

AFFILIATION: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

Please mail to:

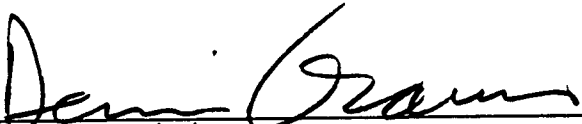
USEPA REGION VII
EMERGENCY PLANNING & RESPONSE BRANCH
25 FUNSTON ROAD
KANSAS CITY, KANSAS 66115

Revision 1
December, 1994

Letter of Promulgation

In accordance with the provisions of Section 311(j)(4)(c) of the Federal Water Pollution Control Act (Commonly referred to as the "Clean Water Act" and cited herein as "CWA"), 33 U.S.C. Section 1321(j)(4)(c), this plan fulfills the statutory requirements for the Region VII Area Contingency Plan (ACP). The functions of designating areas, appointing Area Committee members, and reviewing and approving the ACP has been delegated by Executive Order 12777, October 22, 1991, to the Administrator of the Environmental Protection Agency (EPA) for the inland zone. This area has been designated as EPA Region VII (Iowa, Kansas, Missouri, and Nebraska) and the Area Committee has been designated as Region VII Regional Response Team (RRT), responsible for reviewing and developing the ACP under the guidance of Jim MacDonald, USEPA Region VII OSC.

Comments and recommendations regarding this plan are invited and should be addressed to Jim MacDonald, OSC, U.S. Environmental Protection Agency, Region VII, 25 Funston Road, Kansas City, Kansas, 66115. This plan will be kept under review. Changes, additional information, or corrections will be promulgated as necessary and will be consecutively numbered.



Regional Administrator
U.S. Environmental Protection Agency
Region VII

DISTRIBUTION

Copies of this plan and all amendments and changes will be distributed to the following: EPA Chairman of the National Response Team (NRT) in Washington, D.C. for NRT distribution; each of the member agencies of the Region VII Regional Response Team listed in Appendix D of this plan; the U.S. Environmental Protection Agency (EPA) Emergency Planning & Response Branch; the National Response Center (NRC); and the State, Indian Tribal and Federal Natural Resources Trustees.

A document control format is used to allow revisions to be distributed on a revised page by page basis. A record will be kept of the recipients of each plan for mailing of subsequent revisions to the ACP (see next page).

DISTRIBUTION LIST

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REVISION/UPDATE

USEPA Region VII Area Contingency Plan (ACP) shall be reviewed and updated annually, by the 1st of January. The plan shall be reviewed to ensure all information is current by the Area Committee and submitted to all interested parties.

A document control format is used to allow revisions to be distributed on a revised page by page basis. Each copy of a USEPA Region VII ACP will be numbered and a record kept of the recipients of each plan for mailing of subsequent revisions to the ACP (see next page).

The ACP will be updated annually for the first five years of the plan and then once every five years.

NOTE: Any changes to the plan must be noted on the record of the changes page.

AMENDMENTS

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TABLE OF CONTENTS
EPA REGION VII
AREA CONTINGENCY PLAN

I. INTRODUCTION	1
A. Purpose and Objective	1
B. Authority and Applicability	1
C. Scope	1
D. Geographic Description	2
E. Response Boundaries and Jurisdiction Guidance	2
F. Plan Integration	2
G. Abbreviations	3
H. Definitions	5
II. RESPONSIBILITY AND ORGANIZATION FOR RESPONSE	9
A. Duties of President Delegated to Federal Agencies	9
B. General Organization Concepts	9
C. National Response Team	9
D. Regional Response Team	9
E. Area Committee	10
F. On-Scene Coordinators: General Responsibilities	10
G. Responsible Party Policy	10
H. Notification and Communications	12
I. Determinations to Initiate Response and Special Conditions	12
J. Response Operations	13
K. Multi-Area Responses	15
L. Special Teams and Other Assistance Available to OSCs	16
M. Unified Command System (UCS)	20
N. Worker Health and Safety	20
O. Public Information and Community Relations	21
P. Documentation and Cost Recovery	22
Q. OSC Reports	23
R. Federal Agency Participation	23
S. State and Local Participation in Response	24
T. Non-governmental Participation	25
III. PLANNING AND PREPAREDNESS	27
A. General	27
B. Planning and Coordination Structure	27
C. Federal Contingency Plans	28
D. OPA Facility and Vessel Response Plans	29
E. Area Response Drills	30
F. EPCRA Local Emergency Response Plans	30

Revision 1
December, 1994

G.	List of Regional and State Oil/Hazardous Materials Response Plans	30
H.	Worst Case Discharge	32
I.	Adequacy to Remove a Worst Case Discharge	37
IV.	OPERATIONAL RESPONSE PHASES FOR OIL REMOVAL	40
A.	Response	40
B.	Fish and Wildlife Response Plan	40
C.	Funding	41
V.	HAZARDOUS SUBSTANCE RESPONSE	44
A.	General	44
B.	Response	44
VI.	STATE AND LOCAL INVOLVEMENT IN RESPONSE	45
A.	General	45
B.	EPA/State/Local MOA (MOU)	46
C.	Requirements for State Involvement in Enforcement Responses and Site Remedy	47
D.	State Involvement in EPA/USCG-lead Enforcement Negotiations	47
E.	State Involvement in Removal Actions	47
VII.	TRUSTEES FOR NATURAL RESOURCES	48
VIII.	PARTICIPATION BY OTHER PERSONS	52
IX.	ADMINISTRATIVE RECORD FOR SELECTION OF RESPONSE ACTION .	53
X.	CHEMICAL COUNTERMEASURES	54
XI.	FEDERAL FACILITIES	55

APPENDICES

- Appendix A: Fish and Wildlife and Sensitive
Environments Plan
Environmentally Sensitive Areas
Economically Sensitive Areas
Metropolitan Statistical Areas
- Appendix B: Regulated Facilities
- Appendix C: Region VII Responders, Equipment and Spill
Resources
Maps: EPA Response Boundaries
USCG Response Boundaries
- Appendix D: LEPCs
SERCs
RRT Member List
Area Committee Members List
Emergency Contacts List
- Appendix E: Fund Reimbursement (NPFC) (Under development)
- Appendix F: Spill History (ERNS Database)

ANNEXES

- Annex I: USCG/EPA MOU
- Annex II: Disposal Requirements (Under development)
- Annex III: Unified Command System (Draft)

EPA REGION VII AREA CONTINGENCY PLAN

I. INTRODUCTION

A. Purpose and Objective

The purpose of this Area Contingency Plan (ACP) is to provide an action plan to respond to a release and to promote timely and effective coordination among the entire spill community, including Federal, State, tribal, local and private entities in response to a discharge or substantial threat of discharge.

B. Authority and Applicability

This ACP is required by Section 311(j)(4)(c) of the Clean Water Act (CWA), 33 U.S.C. § 1321(j)(4)(c), as amended by the Oil Pollution Act of 1990 (OPA 90).

This ACP is written in conjunction with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601, as amended.

C. Scope

The ACP applies to and is in effect for:

1. Discharges of oil into or on the navigable waters, on the adjoining shorelines to the navigable waters, into or on the waters of the exclusive economic zone, or that may affect natural resources, belonging to, appertaining to, or under the exclusive management authority of the United States;
2. Discharges or releases into the environment of hazardous substances, and pollutants or contaminants which may present an imminent and substantial danger to public health or welfare in the Areas defined in the

Environmentally Sensitive Areas (ESAs) Appendix,
(Appendix A.2).

D. Geographic Description

The geographic description of this ACP is USEPA Region VII, which encompasses the states of Kansas, Iowa, Missouri and Nebraska. Detailed descriptions of areas of special economic and environmental concern can be found in Appendix A.2 and A.3, Environmentally and Economically Sensitive Areas.

E. Response Boundaries and Jurisdiction Guidance

Response Boundaries and Jurisdiction Guidance are discussed in Annex II of the Region VII Regional Contingency Plan (RCP). Overall, the responsibility to provide On-Scene Coordinators (OSCs) for incidents or potential incidents is placed upon the EPA, United States Coast Guard (USCG) and Department of Defense (DOD). The DOD will provide an OSC for all DOD-related incidents and for all non-DOD-related incidents occurring on DOD property within Federal Region VII, as outlined in 40 C.F.R. § 300.175(b)(4). All other real or potential incidents will be responded to by OSCs provided by either EPA or the USCG. Appendix C.3 shows EPA and Coast Guard regional boundaries for Region VII.

F. Plan Integration

This ACP expands upon the requirements set forth in the NCP, augments coordination with State and local authorities, and integrates existing State, local, and private sector plans for the Area. Coordination between inland and coastal plans is ensured because the USCG District Commander is the co-chair of the Regional Response Team (RRT), and the RRT aids in Area planning and coordination for Region VII. This integration is further strengthened through State involvement in both inland and coastal Area planning.

Facility Response Plans (FRPs), as defined by Section 311(j)(5)(A) of the CWA, 33 U.S.C. § 1321(j)(5)(A), shall be reviewed for approval and consistency with this ACP. During a response, the OSC shall meet with the other responding parties to coordinate and integrate this Plan with all other relevant plans including, but not limited to, Federal, State, local, tribal, and private plans. The Area Committee

will continuously review the effectiveness and integration of all plans based on actual responses, exercises, and all other relevant information leading to enhancement of these plans. Further discussion of contingency plan integration is discussed in sections II.K, II.M, III.A and VI.B.

G. Abbreviations

Federal Department and Agency Title Abbreviations:

ATSDR - Agency for Toxic Substances and Disease Registry
 DOC - Department of Commerce
 DOD - Department of Defense
 DOE - Department of Energy
 DOI - Department of the Interior
 DOJ - Department of Justice
 DOL - Department of Labor
 DOS - Department of State
 DOT - Department of Transportation
 EPA - Environmental Protection Agency
 FEMA - Federal Emergency Management Agency
 GSA - General Services Administration
 HHS - Department of Health and Human Services
 NIOSH - National Institute for Occupational Safety and Health
 NOAA - National Oceanic and Atmospheric Administration
 OPS - Office of Pipeline Safety
 RSPA - Research and Special Programs Administration
 USCG - United States Coast Guard
 USDA - United States Department of Agriculture
 USFWS - United States Fish and Wildlife Service

State Abbreviations:

IDNR - Iowa Department of Natural Resources
 KDHE - Kansas Department of Health and Environment
 MDNR - Missouri Department of Natural Resources
 NDEQ - Nebraska Department of Environmental Quality

Other abbreviations used throughout this document include the following:

AC - Area Committee
 ACP - Area Contingency Plan

ARARS - Applicable or Relevant and Appropriate Requirements
CAMEO - Computer-Aided Management of Emergency Operations (a software program)
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
COTP - Captain of the Port (USCG)
CRC - Community Relations Coordinator
CRP - Community Relations Plan
CWA - Clean Water Act (Federal Water Pollution Control Act)
DRAT - District Response Advisory Team (USCG)
EERU - Environmental Emergency Response Unit
EPCRA - Emergency Planning and Community Right-To-Know Act (SARA Title III)
ERCS - Emergency Response Cleanup Services Contracts
ERNS - Emergency Response Notification System
ERT - Environmental Response Team
FOSC - Federal On-Scene Coordinator
FRP - Facility Response Plan
FWPCA - Federal Water Pollution Control Act
HAZMAT - Hazardous Materials
IAG - Interagency Agreement
ICS - Incident Command System
LEPC - Local Emergency Planning Committee
LOSC - Local On-Scene Coordinator
MOU - Memorandum of Understanding
NCP - National Oil and Hazardous Substances Pollution Contingency Plan
NPFC - National Pollution Funds Center
NRC - National Response Center

(Note: Reference is made in the NCP to both the Nuclear Regulatory Commission and the National Response Center. In order to avoid confusion, the NCP and this ACP will spell out Nuclear Regulatory Commission and use the abbreviation "NRC" only with respect to the National Response Center.)

NRT - National Response Team
NSF - National Strike Force
NSFCC - National Strike Force Coordination Center
O&M - Operation and Maintenance
OPA 90 - Oil Pollution Act of 1990
OSC - On-Scene Coordinator
OSLTF - Oil Spill Liability Trust Fund
PIAT - Public Information Assist Team
PREP - National Preparedness for Response Exercise Program

PRP - Potentially Responsible Party
RA - Remedial Action
RCP - Regional Contingency Plan
RERT - Radiological Emergency Response Team
RRC - Regional Response Center
RRT - Regional Response Team
SAC - Support Agency Coordinator
SERC - State Emergency Response Commission
SOSC - State On-Scene Coordinator
SSC - Scientific Support Coordinator
SUPSALV - United States Navy Supervisor of Salvage
TAT - Technical Assistance Team
USFWS - United States Fish and Wildlife Service
WCD - Worst Case Discharge

H. Definitions

Terms used herein are defined in Section 300.5 of the NCP, 40 C.F.R. § 300.5, ("Definitions"), Section 311 (a) of the CWA 33 U.S.C. § 1321(a) and OPA 90 ("Definitions"), 33 U.S.C. § 2701, and the regulations promulgated thereunder.

Area Committee: Means the entity appointed by the President consisting of members from qualified personnel of federal, state, and local agencies with responsibilities that include preparing an area contingency plan for an area designated by the President. Section 311(j)(4) of the CWA, 33 U.S.C. § 1321(j)(4).

Area Contingency Plan: means the plan prepared by an Area Committee that is developed to be implemented in part to address removal of a worst case discharge and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near and area designated by the President. Section 311(j)(4) of the CWA, 33 U.S.C. § 1321(j)(4).

Discharge: Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping, but excludes (a) discharges in compliance with a permit under Section 402 of the CWA, (b) discharges resulting from circumstances identified and reviewed and made a part of the public record with respect to a permit issued or modified under Section 402 of the CWA, and subject to a condition in such permit, and (c) continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under Section

402 of the CWA, which are caused by events occurring within the scope of relevant operating or treatment systems. Section 311(a) of the CWA, 33 U.S.C. § 1321(a). For purposes of the NCP, discharge also means substantial threat of discharge.

Environmentally sensitive area: An especially delicate or sensitive natural resource that requires protection in the event of a pollution incident. Designations of areas considered to be sensitive can be found in Appendix D of the Facility Response Plan rule. In addition to this definition, Area Committees may include any areas determined to be "sensitive" for OPA 90 planning purposes. These areas may include various habitats that are not specifically under the jurisdiction of a Federal or State agency, but may provide important habitat year around or seasonally for various aquatic or terrestrial species.

Facility: As defined by section 101(9) of CERCLA, means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer of publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or any site or area, where a hazardous substance has been deposited, stored, disposed of, or places, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel. As defined by section 1001 of the OPA it means any structure, group of structures, equipment, of device (other than a vessel) which is used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting oil. This term includes any motor vehicle, rolling stock, or pipeline used for one or more of these purposes.

Hazardous substance: Means any substance designated under Section 311(b)(2) of the CWA, 33 U.S.C. § 1321(b)(2). The designation of hazardous substances is found at 40 C.F.R. Part 116.

Navigable Waters: Means the waters of the United States, including the territorial seas. The term includes but is not limited to:

- (a) All waters which are presently used, or were used in the past, or may be susceptible to use as a means to transport interstate or foreign commerce, including all waters which are subject to the ebb and flow of the

tide, and including adjacent wetlands; the term "wetlands" shall include those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas; the term "adjacent" means bordering, contiguous or neighboring;

(b) Tributaries of navigable waters of the United States, including adjacent wetlands;

(c) Interstate waters, including wetlands;

(d) All other waters of the United States such as intrastate lakes, rivers, streams, mudflats, sandflats, and wetlands, the use, degradation, or destruction of which affect interstate commerce including but not limited to:

- (1) Interstate lakes, rivers, streams, and wetlands which are utilized by interstate travelers for recreational or other purposes; and
- (2) Interstate lakes, rivers, streams, and wetlands which fish or shellfish are or could be taken and sold in interstate commerce; and
- (3) Interstate lakes, rivers, streams, and wetlands which are utilized for industrial purposes by industries in interstate commerce 33 U.S.C. § 2701(21), 40 C.F.R. § 116.3.

Oil: Means oil of any kind or in any form, including but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with waste other than dredged spoil. 33 U.S.C. § 1321(a)(1). Oil does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of Section 101(14) of CERCLA, 42 U.S.C. § 9601, and which is subject to the provisions of CERCLA. 33 U.S.C. § 2701(23).

On-Scene Coordinator (OSC): The government official at an incident scene responsible for coordinating response activities.

Regional Response Team (RRT): The Federal response organization (consisting of representatives from selected

Federal and State agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and for providing advice to the OSC in the event of a major or substantial spill.

Worst Case Discharge: Means (a) in the case of a vessel, a discharge in adverse weather conditions of its entire cargo, and (b) in the case of an offshore facility or onshore facility, the largest foreseeable discharge in adverse weather conditions.

II. RESPONSIBILITY AND ORGANIZATION FOR RESPONSE

A. Duties of President Delegated to Federal Agencies

In Executive Order 12777, the President delegated certain functions and responsibilities vested in him by the OPA 90 to the Administrator of the EPA for the inland zone and the commandant of the USCG through the Secretary of Transportation for the coastal zone. These functions and responsibilities include designating Areas, appointing Area committee members, determining the information to be included in ACPs, and reviewing and approving ACPs. The EPA shall assign a Federal OSC to each inland zone Area to carry out these functions and responsibilities.

B. General Organization Concepts

The Area Committees, in conjunction with the National Response Team (NRT) and the Regional Response Teams (RRTs), serve a spill planning and preparedness role within the National Response System. Each Area Committee shall be composed of Federal, State and local agency personnel. Under the direction of the Federal OSC, each Area Committee for its assigned Area shall:

1. Prepare and submit for approval an ACP;
2. Work with State and local officials to integrate contingency planning and response efforts; and
3. Work with State and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

C. National Response Team

National planning and coordination is accomplished through the NRT. The NRT consists of representatives from the USCG, EPA, FEMA, DOD, DOE, USDA, DOC, HHS, DOI, DOJ, DOL, DOT, DOS, GSA, and Nuclear Regulatory Commission. For details, see the NCP at 40 C.F.R. § 300.175(b).

D. Regional Response Team

Regional planning and coordination of preparedness and response actions is accomplished through the RRT. The

RRT agency membership parallels that of the NRT but also includes State and local representation.

E. Area Committee

Area planning and coordination of preparedness and response actions is accomplished through the Area Committee. The Area Committee membership includes Federal, State, and local representation. Members of the Area Committee are appointed by the Regional Administrator.

F. On-Scene Coordinators: General Responsibilities

The NCP, at 40 C.F.R. § 300.120, describes the general responsibilities of OSCs. The OSC directs response efforts and coordinates all other efforts at the scene of a discharge or release. OSCs are predesignated by the regional or district head of the lead agency. EPA and the USCG predesignate OSCs for all areas in each region except for any facility or vessel under the jurisdiction, custody, or control of other Federal agencies. The EPA designates Federal OSCs for the inland zones.

Under OPA 90, the Federal OSC has responsibilities related to the establishment of Area committees and the development of ACPs. The Federal OSC chairs the Area Committee and provides general direction and guidance for the committee as it prepares the ACP.

G. Responsible Party Policy

Under OPA 90, the responsible party has primary responsibility for cleanup of a discharge. The response shall be conducted in accordance with the PRP's applicable response plan. Section 311(c)(3)(B) of CWA, 33 U.S.C. § 1321(c)(3)(B), requires an owner or operator of a facility participating in removal efforts to act in accordance with the NCP and the applicable response plan. Section 311(j)(5)(C) of CWA requires that these response plans shall:

"(i) be consistent with the requirements of the National Contingency Plan and Area Contingency Plans;

"(ii) identify the qualified individual having full authority to implement removal actions, and require immediate communication between that individual and the

appropriate Federal official and the persons providing personnel and equipment pursuant to clause (iii);

"(iii) identify, and ensure by contract or other means approved by the President the availability of, private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge;

"(iv) describe the training, equipment testing, periodic unannounced drills, and response actions of persons on the vessel or at the facility, to be carried out under the plan to ensure the safety of the vessel or the facility and to mitigate or prevent the discharge, or substantial threat of a discharge;

"(v) be updated periodically; and

"(vi) be resubmitted for approval of each significant change." 33 U.S.C. § 1321(j)(5)(c).

All owners or operators of a tank vessel or facility that are required by OPA 90 to submit a response plan shall do so in accordance with applicable regulations. Facility and tank vessel response plan regulations, including plan requirements, are located in 33 C.F.R. § 154 and 40 C.F.R. § 112, respectively. Prior to approval, facility and vessel response plans shall be reviewed for consistency with this ACP.

As defined in OPA 90, each responsible party for a vessel or a facility from which oil is discharged, or which poses a substantial threat of a discharge, into or upon the navigable waters or adjoining shorelines or the Exclusive Economic Zone is liable for the removal costs and damages specified in Section 311(f) of CWA, 33 U.S.C. § 311(f). Any removal activity undertaken by the responsible party must be consistent with the provisions of the NCP, RCP, ACP and the applicable response plan required by OPA 90. If directed by the Federal OSC at any time during removal activities, the responsible party must act accordingly.

H. Notification and Communications

The National Response Center (NRC) is the national communications center for handling activities related to

response actions. The NRC acts as the single point of contact for all pollution incident reporting. Notice of an oil discharge or release of a hazardous substance in an amount equal to or greater than the reportable quantity must be made immediately in accordance with the CWA and CERCLA under 33 C.F.R. Part 153, Subpart B, and 40 C.F.R. part 302, respectively. Notification shall be made to the NRC Duty Officer, HQ USCG, Washington, DC, telephone (800) 424-8802 or (202) 267-2675. All notices of discharges or releases received at the NRC will be relayed immediately by telephone to the appropriate predesignated Federal OSC.

In addition, facilities may be required to report releases of specified hazardous substances to the State Emergency Response Commission (SERC) and the Local Emergency Planning Committee (LEPC) under Section 304 of the Emergency Planning and Community Right-To-Know Act (EPCRA), 2 U.S.C. § 11004.

I. Determinations to Initiate Response and Special Conditions

The President shall, in accordance with the NCP and any appropriate ACP, ensure effective and immediate removal of a discharge, and mitigation or prevention of a substantial threat of a discharge of oil or hazardous substance. 33 U.S.C. § 1321(c). In carrying out this mandate, the President may direct or monitor all Federal, State, and private actions to remove a discharge. The NCP authorized EPA or the USCG to act for the United States to take response measures deemed necessary to protect public health or welfare or the environment from discharges of oil or releases of hazardous substances, pollutants, or contaminants except with respect to such releases on or from vessels or facilities under the jurisdiction, custody, or control of other Federal agencies. 40 C.F.R. § 300.130. The assigned Federal OSC may initiate a response. Upon approval by the Federal OSC, State or local governments may initiate a government response. Initiation of a response by private parties is addressed in Section VIII below.

J. Response Operations

To the extent practicable, response operations shall be consistent with Federal, State, and local plans, including ACPs and Facility Response Plans (FRPs). The NRC is the national communications center for activities related to pollution response actions. It is located at USCG Headquarters in Washington, D.C. The NRC receives and provides computer developed spill trajectory forecasts for spills, disseminates OSC and RRT reports to the NRT when appropriate, and provides facilities for the NRT to use in coordination of a national response action when required. The NRC also maintains tele-conferencing capability, as well as a technical library on oil and hazardous substances and can evaluate chemical discharge hazards.

The Regional Response Center (RRC) is the regional site for notification, communication, and inter-agency coordination during a pollution incident. The RRC will be located at the appropriate Coast Guard district office when an incident occurs within its jurisdiction area. The RRC will be located in the EPA Regional Office when an incident occurs in all other areas of Region VII.

The EPA RRC located in EPA Region VII, 25 Funston Road, Kansas City, Kansas, 66115, will provide a predesignated OSC and will coordinate communication, information, limited supplies and equipment, and other personnel and facilities necessary to allow proper functioning and administration of this plan. The state, as well as trustees for natural resources, will be notified of all spills.

The OSC shall direct response efforts and coordinate all other efforts at the scene of a discharge or release. As part of the planning and preparations for response, the OSCs are predesignated by the regional or district head of the lead agency, as spelled out in section 300.120 of the NCP.

The first Federal official affiliated with an RRT-member agency to arrive at the scene of a discharge or release should coordinate activities under the ACP and is authorized to initiate, in consultation with the OSC, any necessary actions normally carried out by the OSC until the arrival of the predesignated OSC. This official may initiate Federal Fund-financed actions only as authorized by

the OSC or, if the OSC is unavailable, the authorized representative of the lead agency.

The OSC shall, to the extent practicable, collect pertinent facts about the discharge or release, such as its source and cause; the identification of potentially responsible parties; the nature, amount, and locations of discharged or released materials; the probable direction and time of travel of discharged or released materials; the pathways to human and environmental exposure; the potential impact on human health, welfare, and safety and the environment; the potential impact on natural resources and property which may be affected; priorities for protecting human health and welfare and the environment; and appropriate cost documentation.

The OSC's efforts shall be coordinated with other appropriate Federal, State, local, and private response agencies. OSCs may designate capable persons from Federal, State, or local agencies to act as their on-scene representatives. State and local governments, however, are not authorized to take actions under Subparts D and E of the NCP that involve expenditures of CWA section 311(k) or CERCLA funds unless an appropriate contract or cooperative agreement has been established.

The OSC should consult regularly with the RRT in carrying out the NCP and ACP and keep the RRT informed of activities under the NCP and ACP.

The OSC shall advise the support agency as promptly as possible of reported releases.

The OSC shall immediately notify the Federal Emergency Management Agency (FEMA) of situations potentially requiring evacuation, temporary housing, or permanent relocation. In addition, the OSC shall evaluate incoming information and immediately advise FEMA of potential major disaster situations.

In those instances where a possible public health emergency exists, the OSC should notify the Department of Health and Human Services (HHS) representative to the RRT. Throughout response actions, the OSC may call upon the HHS representative for assistance in determining public health threats and call upon the Occupational Safety and Health Administration (OSHA) and HHS for advice on worker health and safety problems.

All Federal agencies should plan for emergencies and develop procedures for dealing with oil discharges and releases of hazardous substances, pollutants, or contaminants from vessels and facilities under their jurisdictions. All Federal agencies, therefore, are responsible for designating the office that coordinates response to such incidents in accordance with the NCP and applicable Federal regulations and guidelines.

EPA Region VII and the USCG Second Division, are responsible for responding to incidents, and EPA will provide predesignated OSCs to all pollution response activities in the inland zone. However, DOD and DOE shall designate OSCs for releases of hazardous substances, pollutants, or contaminants from DOE and DOD facilities and vessels. The EPA will provide OSCs for all CWA discharges and non-DOD CERCLA releases unless otherwise agreed. In certain instances, the USCG may act as the lead agency for actual or threatened pollution incidence involving commercial vessels or marine transportation related facilities. The areas of responsibility have been established by a joint EPA and USCG Memorandum of Understanding (MOU). This memorandum is contained in Annex I.

The OSC shall promptly notify and coordinate with the trustees for natural resources in the event of discharges or releases that are injuring or may injure natural resources under their jurisdiction. When the OSC becomes aware that a discharge or release may adversely affect any endangered or threatened species, or result in destruction or adverse modification of the habitat of such species, the OSC should consult with the Department of the Interior (DOI) or the Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA).

The OSC is responsible for addressing worker health and safety concerns at a response scene in accordance with the NCP. 40 C.F.R. § 300.155.

K. Multi-Area Responses

1. In the event that an actual or threatened discharge or release moves from the domain covered by one ACP into another domain, the authority to initiate pollution control actions shall likewise shift. In the event that an actual or potential incident affects areas covered by two or more area plans, the response mechanisms called for by both plans

shall be activated. The NRT will be notified in the event of a discharge which transcends area boundaries (e.g. the Mississippi River). If necessary, the NRT will be activated to coordinate cleanup efforts, personnel and equipment between the affected areas.

2. There shall be only one Federal OSC at any time during the course of a response operation. Should a discharge or a release affect two or more areas, the OSC shall be designated by joint agreement of the USCG, EPA, and if appropriate, DOE or DOD. In making this designation agreement, prime consideration will be given to the areas vulnerable to the greatest damage. The RRT shall designate the OSC by consensus if such agreement cannot be reached. The NRT shall designate the OSC if members of one RRT or two adjacent RRTs are unable to agree on the designation.

3. During a multi-regional response, oil discharge or releases of hazardous substance that occurs within Region VII may affect EPA Region VIII (Colorado, Wyoming, South Dakota), EPA Region V (Minnesota, Wisconsin, Illinois), EPA Region IV (Kentucky, Tennessee), EPA Region VI (Arkansas, Oklahoma), or the Eighth U.S. Coast Guard District. The same procedures apply as to multi-area responses.

L. Special Teams and Other Assistance Available to OSCs

1. The National Strike Force (NSF) is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center (NSFCC). The NSF is available to assist OSCs in their preparedness and response duties. The NSF may be accessed through the NRC at (800) 424-8802.

The three Strike Teams provide trained personnel and specialized equipment to assist the OSC in training for spill response, stabilizing and containing the spill, and in monitoring or directing the response actions of the responsible parties and/or contractors.

The NSFCC can provide the following support to the OSC:

- 1) Technical assistance, equipment, and other resources during spill response.
- 2) Assistance in coordinating the use of private and public resources.

- 3) Review of the area contingency plan.
- 4) Assistance in locating spill response resources for both response and planning.
- 5) Coordination and evaluation of pollution response exercises.
- 6) Inspection of district prepositioned response equipment.

PIAT is an element of the NSFCC staff, which is available to assist OSCs to meet the demands for public information during a response of exercise. Its use is encouraged any time the OSC requires outside public affairs support. Requests for PIAT assistance may be made through the NSFCC or NRC.

1. The Environmental Response Team (ERT) is established by EPA in accordance with its disaster and emergency responsibilities. The ERT has expertise in treatment technology, biology, chemistry, hydrology, geology, and engineering.

The ERT can provide access to special decontamination equipment for chemical releases and advice to the OSC in hazard evaluation; risk assessment; multimedia sampling and analysis program; on-site safety, including development and implementation plans; cleanup techniques and priorities; water supply decontamination and protection; application of dispersants; environmental assessment; degree of cleanup required; and disposal of contaminated material.

The ERT also provides both introductory and intermediate level training courses to prepare response personnel.

OSC or RRT request for ERT support should be made directly to the Edison, New Jersey office. The 24-hour phone number for ERT is (908) 321-6660.

2. Scientific support coordinators (SSCs) are available, at the request of OSCs, to assist with actual or potential responses to discharges of oil or releases of hazardous substances, pollutants, or contaminants. The SSC will also provide scientific support for the development of RCPs and ACPs. Generally, SSCs are provided by NOAA in coastal and marine areas, and by EPA (ERT) in the inland zone. In the case of NOAA, SSCs may be supported in the

field by a team providing, as necessary, expertise in chemistry, trajectory modeling, natural resources at risk, and data management. NOAA SSCs may be contacted through the following phone number: (206) 526-6317.

During a response, the SSC serves under the direction of the OSC and is responsible for providing scientific support for operational decisions and for coordinating on-scene scientific activity. Depending on the nature of the incident, the SSC can be expected to provide certain specialized scientific skills and to work with governmental agencies, universities, community representatives, and industry to compile information that would assist the OSC in assessing the hazards and potential effects of discharges and releases and in developing response strategies.

If requested by the OSC, the SSC will serve as the principal liaison for scientific information and will facilitate communications to and from the scientific community on response issues. The SSC, in this role, will strive for a consensus on scientific issues surrounding the response but will also ensure that any differing opinions within the community are communicated to the OSC.

The SSC will assist the OSC in responding to requests for assistance from State and Federal agencies regarding scientific studies and environmental assessments.

For marine salvage operations, OSCs with responsibility for monitoring, evaluating, or supervising these activities should request technical assistance from DOD, the Strike Teams, or commercial salvagers as necessary to ensure that proper actions are taken.

3. Radiological Emergency Response Teams (RERTs) have been established by EPA's Office of Radiation Programs (ORP) to provide response and support for incidents or sites containing radiological hazards. Expertise is available in radiation monitoring, radionuclide analysis, radiation health physics, and risk assessment. RERTs can provide on-site support including mobile monitoring laboratories for field analyses of samples and fixed laboratories for radiochemical sampling and analyses. Requests for support may be made 24 hours a day to the Radiological Response Coordinator in the EPA ORPs. Assistance is also available from the Department of Energy (DOE) and other Federal agencies.

4. The National Pollution Funds Center (NPFC) is responsible for implementing those portions of OPA 90 that have been delegated to the USCG. The NPFC is responsible for addressing funding issues arising from discharges and threats of discharges of oil. The phone number for the NPFC is (703) 235-4756.

5. The Environmental Emergency Response Unit (EERU) is contracted to ERT. The spill response group operates and maintains field-ready equipment and provides site-support services to the ERT. This unit is on call 24 hours a day. Its activities include monitoring equipment, conducting extent of contamination surveys and collecting multimedia samples. EERU provides both research and development (R&D). The R&D group tests and demonstrates prototype cleanup and control equipment. EERU also gives training courses to demonstrate the different types of equipment tested.

6. The Technical Assistance Team (TAT) is contracted to provide technical expertise for the response to and investigation of oil and hazardous substances incidents. The team has personnel trained in health and safety, multimedia field monitoring and sampling, incident documentation, cost monitoring, cleanup restoration, and disposal techniques during oil and hazardous substances incidents. The 24-hour pager number is (816) 247-8482 or (816) 247-6165.

7. The Emergency Response Cleanup Services Contracts (ERCS) is a contracting network that may be used by the OSC to provide support for all federally funded emergency cleanup operation on oil and hazardous substances releases. The ERCS contractor operates a 24-hour, seven-day-a-week call center to maintain response capability and accept and implement delivery orders. Delivery orders may be initiated in a predetermined response time to support the OSC with trained personnel and equipment to control, stabilize, clean up, and subcontract transportation and disposal during oil and hazardous substances releases. The 24-hour emergency number is 1-800-334-0004.

8. Local Fire Departments - A listing of all local fire departments within the four states in Region VII is available through EPA Region VII, Emergency Planning and Response (EP&R), 25 Funston, Kansas City, Kansas 66115, (913) 551-5000 (Refer to Appendix C.1 for more information). The listings include the county, address, and Chief of each fire department. Also available through EP&R is the Fire .

Supplies and Equipment Catalog, which lists fire supplies and equipment stocked by the National Fire Equipment System (NFES) caches. (Refer to Appendix C.2)

NOTE: Response equipment available from the special teams listed above is listed in Appendix C.2.

M. Unified Command System (UCS)

The Unified Command System (UCS) is proposed to be implemented among EPA Region VII, State, and local government organizations, and the responsible party. Under an UCS, appropriate on-scene officials of each agency shall participate in the coordination of the decision-making process during the response. The UCS allows for a coordinated response effort, helps to ensure a coordinated, effective response is carried out and that the particular needs of all parties involved are taken into consideration. The FOSC has the ultimate authority in a response operation and will exert this authority only if the other members of the unified command are not present or are unable to reach consensus within a reasonable time frame.

During responses to oil discharges, local agencies may be involved as part of the unified command, and may provide agency representatives who interface with the command structure through the Liaison Officer or the State representative.

N. Worker Health and Safety

Response actions under the ACP will comply with the provisions for response action worker safety and health in 29 C.F.R. § 1910.120.

In a response action taken by a responsible party, the responsible party must assure that an occupational safety and health (OSHA) program consistent with 29 C.F.R. § 1910.120 is made available for the protection of workers at the response site.

In a response taken under the ACP by a lead agency, an OSHA program should be made available for the protection of workers at the response site, consistent with, and to the extent required by, 29 C.F.R. § 1910.120. Contracts relating to a response action under the ACP should contain assurances that the contractor at the response site will

comply with this program and with any applicable provisions of the OSHA Act and State OSHA laws.

When a State, or political subdivision of a State, without an OSHA-approved State plan is the lead agency for response, the State or political subdivision must comply with standards in 40 C.F.R. Part 311, promulgated by EPA pursuant to EPCRA.

Requirements, standards, and regulations of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 651 et seq. (OSHA Act) and of State laws with plans approved under Section 18 of the OSHA Act (State OSHA laws), not directly referenced in paragraphs (a) through (d) of this section, must be complied with where applicable. Federal OSHA Act requirements include, among other things, Construction Standards, 29 C.F.R. Part 1926, General Industry Standards, 29 C.F.R. Part 1910, and the general duty requirements of Section 5(a)(1) of the OSHA Act, 29 U.S.C. § 654(a)(1). No action by the lead agency with respect to response activities under the ACP constitutes an exercise of statutory authority within the meaning of Section 4(b)(1) of the OSHA Act. All governmental agencies and private employers are directly responsible for the health and safety of their own employees.

Act. Health and safety limitations shall apply during Incident Command System (ICS) emergencies. Response actions under this ACP will comply with the provisions for response action worker safety and health in 29 C.F.R. § 1910.120, and all persons at the response scene must have received OSHA training and certification, which is the direct responsibility of each government agency or private employer.

O. Public Information and Community Relations

During an incident, it is imperative to give the public prompt and accurate information on the nature of the incident and the actions underway to mitigate the damage. OSCs and community relations personnel should ensure that all appropriate public and private interests are kept informed and that their concerns are considered throughout a response. They should coordinate with available public affairs/community relations resources to carry out this responsibility. At the discretion of the OSC, an information coordination center should be established or a person designated to assist in this effort.

Provisions of this section, as contained in the NCP, apply to all activities within Region VII. Additionally, the requirements of Section 300.155 of the NCP mandate the development of formal community relations plans for certain CERCLA response actions. (40 C.F.R. § 300.155). There will be one designated spokesperson for public information and press relations.

The full resources of the RRT will be made available to all OSCs, upon request, to assist in the development of all community relation plans required by this Section of the NCP. A copy of all community relations plans will be submitted as an enclosure to the OSC reports. The community relations plan shall provide for keeping the public informed in the affected area. A trained person should be appointed spokesperson. The spokesperson should be included in the chain of command. Other members of the response team should be trained to direct all communications and public relations issues to the spokesperson. A list of radio and TV contacts should be included in the plan. A copy of all community relations plans will be forwarded to all involved RRT members as soon as developed. RRT members shall provide objections or comments to the chairperson as soon as possible. RRT members should insure their on-scene representatives are familiar with and comply with the plan.

P. Documentation and Cost Recovery

Section 300.335 of the NCP outlines the types of funds which may be available to remove certain oil and hazardous substances discharges. (40 C.F.R. § 300.335). For releases of oil or hazardous substance, pollutant, or contaminant, the following provisions apply:

1. During all phases of response, the lead agency shall complete and maintain documentation to support all actions taken under the ACP and to form the basis for cost recovery. In general, documentation shall be sufficient to provide the source and circumstances of the release, the identity of responsible parties, the response action taken, accurate accounting of Federal, State, or private party costs incurred for response actions, and impacts and potential impacts to the public health and welfare and the environment. Where applicable, documentation shall state when the NRC received notification of a reportable release.

2. The information and reports obtained by the lead agency for Fund-financed response actions shall, as

appropriate, be transmitted to the NPFC. Copies can then be forwarded to the National Response Team (NRT), members of the RRT, and others as appropriate.

Q. OSC Reports

1. As requested by the NRT or RRT, the OSC shall submit to the NRT or RRT a complete report on the removal operations and the actions taken.

2. The OSC report shall record the situation as it developed, the actions taken, the resources committed, and the problems encountered.

R. Federal Agency Participation

Federal agencies listed in Section 300.175 of the NCP have duties established by statute, executive order, or Presidential directive which may apply to Federal response actions following, or in prevention of, the discharge of oil or release of a hazardous substance, pollutant, or contaminant. (40 C.F.R. § 300.175). Federal agencies may be called upon by an OSC during response planning and implementation to provide assistance in their respective areas of expertise. Refer to the NCP, 40 C.F.R. §§ 300.170 and 300.175, for a description of agency capabilities and authorities.

Under Section 311(b) of the CWA, the United States Fish and Wildlife Service (USFWS) and NOAA also have duties with respect to Federal response actions following, or in prevention of, discharges of oil or releases of hazardous substances. These two agencies, and other interested parties (including State fish and wildlife conservation officials), should be consulted in the preparation of a fish and wildlife response plan.

S. State and Local Participation in Response

The NCP at 40 C.F.R. § 300.180 describes general State and local participation in response. Appropriate local and State officials will be identified and participate as part of the response structure as provided in Appendix D of this plan.

Every state governor is asked to assign an office or agency to represent the state on the RRT. The state's representative may participate fully in all facets of RRT activity and shall designate the appropriate element of the

state government that would undertake direction of state managed oil or hazardous substance releases. Each state RRT member also represents and coordinates the RRT involvement of various other state, county, and municipal organizations.

The LEPCs are responsible for the development and maintenance of local emergency response plans in accordance with EPCRA, Sections 301 to 303. The LEPCs membership includes various representatives from local governmental agencies, emergency responders, environmental groups, and local industry. The emergency plans developed by these groups must include the following information: the identity and location of hazardous materials; procedures for immediate response to a chemical accident; ways to notify the public about actions they must take; names of coordinators at plants; and schedules for testing the plan.

The local emergency response plan must be reviewed by a SERC. The RRTs may review the plans and provide assistance if the SERC or LEPC, through the State RRT representative, so requests. Federal contingency plans provide for coordination with local government organizations such as county, city, or town governments. This is especially important for traffic control, land access, and disposal of oil or hazardous materials removed in response operations. State conservation departments, through their State's representative on the RRT, shall coordinate wildlife preservation measures for non-migratory animals. When necessary, the closing of areas to commercial fishing due to health hazards will be accomplished by the appropriate state agency.

T. Non-governmental Participation

Industry groups, academic organizations, and others are encouraged to commit resources for response operations. Specific commitments are listed in the RCP and the ACP.

This plan anticipates and encourages representation from industry, landowners, volunteer groups, and other stakeholders. Non-governmental participants will have an ex-officio role.

There are several non-governmental entities that can provide assistance during a pollution response action within Federal EPA Region VII. A partial listing of this information is provided below and further information is contained in the federal contingency plans.

- Chemical Transportation Emergency Center (CHEMTREC) - Provides technical expertise, coordination of chemical manufactures, emergency response information on chemical spills 1-800-424-9300 (24-hour emergency number); for planning purposes: (202) 887-1255 during working hours.

- Bureau of Explosives - Association of American Railroads, Washington, D.C., can provide technical advice during train accidents. The Bureau of Explosives may provide assistance in the areas of accident assessment, classification of materials, environmental impacts, methods of cleanup and mechanical evaluations of trains. Contact through CHEMTREC at 1-800-424-9300 .

- Kansas State University Hazardous Waste Research Center - Kansas State University (KSU) leads a seven-institution consortium composed of Montana State University and the universities of Iowa, Missouri, Montana, Nebraska, and Utah. The Center was established in February 1989 to conduct research pertaining to the identification, treatment and reduction of hazardous substances resulting from various agricultural and industrial activities.

Dr. Richard Hayter is Technology Transfer Director for the Center. He may be contacted at Ward Hall, KSU, Manhattan, KS 66506-5102. Telephone (913) 532-6519.

- American Petroleum Institute, 2100 L Street, NW, Washington, D.C. 20037, telephone (202) 682-8000. This is an organization consisting of representatives of the petroleum industry. Technical and operational expertise is available.

- National Association of Agricultural Chemists. This organization can provide assistance during incidents involving pesticide spills. The trade name and any available information on the amount and location of the spill should be given when assistance is requested.

- Chemical Manufacturers' Association (CMA) is an association of chemical manufacturers and is located in Washington, D.C. CMA's Community Awareness and Emergency Response (CAER) program provided guidance to chemical plant manufacturers for interactions with the

local community in the development of local hazardous materials response plans. CHEMTREC, as mentioned above, is provided by CMA.

- National Pesticides Telecommunications Network
telephone number (800) 858-7378 is available from 8:00
am to 6:00 pm Central Time.

- Chlorine Institute - phone number (202) 775-2790.

III. PLANNING AND PREPAREDNESS

A. General

Flowcharts and diagrams of the descriptions of planning and coordination structures, Federal contingency plans, and EPCRA local emergency response plans are located in the NCP. The Area committee serves as a planning and preparedness body to support the Federal OSC, and is encouraged to include membership from Federal, State, and local governments and private entities (as ex-officio members). Area Committees are not response support bodies, and are not required to participate in response efforts, but should be composed of response personnel.

B. Planning and Coordination Structure

National - As described in Section 300.110 of the NCP, the NRT is responsible for national planning and coordination. (40 C.F.R. § 300.110).

Regional - As described in Section 300.115 of the NCP, the RRTs are responsible for regional planning and coordination. (40 C.F.R. § 300.115).

Area - Section 311(j) of the CWA requires the Area Committee, under the direction of the Federal OSC for its Area, to be responsible for: (1) preparing an Area Contingency Plan for its Area; (2) working with State and local officials to enhance the contingency planning of those officials and to assure preplanning of joint response efforts, including appropriate procedures for mechanical recovery, dispersal, shoreline cleanup, protection of sensitive environmental areas, and protection, rescue, and rehabilitation of fisheries and wildlife; and (3) working with State and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

State - As provided by Sections 301 and 303 of EPCRA, the SERC of each State, appointed by the Governor, is to designate emergency planning districts, appoint LEPCs, supervise and coordinate their activities, and review local emergency response plans. The SERC also is to establish procedures for receiving and processing requests from the public for information generated by EPCRA reporting

requirements and to designate an official to serve as coordinator for information.

The SERC plans are to assure coordination between local emergency response plans and may establish additional state standards for local emergency response plans, while LEPC plans are to be fully coordinated with the applicable elements of the RCP and any relevant federal contingency plans.

Local - As provided by Sections 301 and 303 of EPCRA, emergency planning districts are designated by the SERC in order to facilitate the preparation and implementation of emergency plans. Each LEPC is to prepare a local emergency response plan for the emergency planning district and establish procedures for receiving and processing requests from the public for information generated by Title III reporting requirements. The LEPC is to appoint a chair and establish rules for the LEPC. The LEPC is to designate an official to serve as coordinator for information.

C. Federal Contingency Plans

There are three levels of Federal contingency plans: the NCP, RCPs, and ACPs. These plans are available for inspection at EPA regional offices or USCG district offices. Addresses and telephone numbers for these offices may be found in the United States Government Manual, issued annually, or in local telephone directories.

The National Contingency Plan - The purpose and objective, authority, and scope of the NCP are described in 40 C.F.R. §§ 300.1 through 300.3.

Regional Contingency Plans - The RRTs, working with the States, shall develop Federal RCPs for each standard Federal region. RCPs shall, as appropriate, include information on all useful facilities and resources in the region, from government, commercial, academic, and other sources. To the greatest extent possible, RCPs shall follow the format of the NCP and coordinate with State emergency response plans, ACPs, which are described in Section 300.210(c) of the NCP, 40 C.F.R. § 300.210(c), and EPCRA local emergency response plans, which are described in Section 300.215 of the NCP, 40 C.F.R. § 300.215. Such coordination should be accomplished by working with the SERCs in the region covered by the RCP. RCPs shall contain

lines of demarcation between the inland and coastal zones, as mutually agreed upon by USCG and EPA.

Area Contingency Plans - In order to provide for a coordinated, effective Federal, State, and local response, each OSC shall direct the Area Committee to develop an ACP for response in the Area. ACPs shall be developed for all Areas, because OSCs in the designated Areas have responsibility for discharges and releases, which often exceed the jurisdiction and capabilities of other responders. Boundaries for Areas are determined by EPA Regional Administrators for the inland zone; Areas are the Captain of the Port (COTP) areas for the coastal zone. Jurisdictional boundaries of local emergency planning districts established by States, described in Section 300.205(c) of the NCP, shall, as appropriate, be considered in determining geographical boundaries of the designated Areas. (40 C.F.R. § 300.205(c)). The designated Areas may include several such local emergency planning districts, or parts of such districts. In developing the ACP, OSCs shall direct the Area Committees to coordinate with SERCs and LEPCs in the affected Area.

The ACP shall provide for a well-coordinated response that is integrated and compatible with all appropriate response plans of State, local, and other non-Federal entities, and especially with EPCRA local emergency response plans, or in the Area Committee's area of responsibility. The ACP shall, as appropriate, identify the probable locations of discharges or releases. See Appendices B.1 and B.2. It should list available resources to respond to multi-media incidents, where such resources can be obtained, waste disposal methods and facilities consistent with local and State plans developed under the Solid Waste Disposal Act, 42 U.S.C. § 6901 et seq., and a local structure for responding to discharges or releases. (See Appendix C.)

D. OPA Facility and Vessel Response Plans

This section describes and cross references the regulations that implement sections 311(j)(5) of the CWA. A tank vessel, as defined under section 2101 of title 46, U.S. code, and offshore facility, and an onshore facility that, because of its location, could reasonably expect to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or exclusive economic zone must prepare and submit a plan for responding, to the maximum extent practicable, to a worst

case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance. These response plans are required to be consistent with applicable Area Contingency Plans. (listing of referenced facilities found in Appendix B)

E. Area Response Drills

The OSC periodically shall conduct drills of removal capability (including fish and wildlife response capability), without prior notice, in areas for which ACPs are required by 300.210(c) of the NCP and under relevant tank vessel and facility response plans.

F. EPCRA Local Emergency Response Plans

The regulations that implement EPCRA are codified at 40 C.F.R. Part 355.

Each LEPC is to prepare an emergency response plan in accordance with Section 303 of EPCRA and review the plan once a year, or more frequently as changed circumstances in the community or at any subject facility may require. Such local emergency response plans should be closely coordinated with applicable ACPs and State emergency response plans. To assure coordination with EPCRA, it is recommended that the Area Committee include appropriate LEPC or other EPCRA representation.

Appendix D.1 and D.2 contains a listing of state LEPCs and SERCs, respectively.

G. List of Regional and State Oil/Hazardous Materials Response Plans

1. Regional Contingency Plans

- Region IV Oil and Hazardous Substances Contingency Plan This plan is maintained and is available for inspection at:

U.S. Environmental Protection Agency
345 Courtland Street
Atlanta, GA 30365
(404) 881-3931

- Region V Oil and Hazardous Substances Contingency Plan. This plan is maintained and is available for inspection at:

U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, IL 60604
(312) 896-7591

- Region VI Oil and Hazardous Substances Contingency Plan. This plan is maintained and is available for inspection at:

U.S. Environmental Protection Agency
First Interstate Bank Tower at Fountain Place
1445 Ross Avenue
Dallas, TX 74202
(214) 655-2222

- Region VIII Oil and Hazardous Substances Contingency Plan. This plan is maintained and is available for inspection at:

U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, CO 80202-2405
(303) 293-1788

2. List of State Contingency Plans

- Missouri Hazardous Substance Emergency Response Plan
- Iowa's Hazardous Materials Plan
- Nebraska
- Kansas

3. List of other Contingency Plans maintained by Region VII

- Upper Mississippi River Spill Response Plan and Resource Manual.
- Draft Northern New Madrid Risk Area Supplement, Emergency Support Function #10,

Hazardous Materials Plan for a Federal Response to a Catastrophic Disaster.

H. Worst Case Discharge

Section 311(j)(4)(C)(i), of the CWA, requires that the ACP, when implemented in conjunction with the NCP, be adequate to remove a worst case discharge. Region VII determines a worst case discharge to involve ANY discharge or threat of a discharge, in significant quantities to impact public health, welfare or the environment, where the parties responsible for the threat or discharge are unwilling or unable to perform the required response actions.

Below is a oil spill scenario that is applicable to Region VII. The following information is a parameter to cover what may be a worst case discharge. The information will be updated as more FRPs are received and as other regulations are developed.

OIL SPILL SCENARIO (WORST CASE):

Assumptions: In all cases, assume parties contributing to the spill are not taking or cannot take appropriate response action.

Hazard Assessment: Each State within Region VII is unique but all also share some common concerns. By looking at the past history of incidents (i.e. natural or technological accidents) the inevitable future occurrences can be better prepared for. A facility located near a fault line, river's edge or related natural hazard, has the potential to cause or be economically impacted or affect ESAs. Understanding the community or surrounding area is crucial for proper planning. An industry which produces, uses, or stores oil may result in a high risk of technological hazard to the community. Although the community may not appear to be at risk, the facility may be close to a highly vulnerable area.

Vulnerability Analysis: Particular points of environmental and economic sensitivity include, but are not limited to the Environmentally and Economically Sensitive Areas, for Iowa, Kansas, Missouri and Nebraska, listed in Appendices A.2 and A.3.

Seasonal/Geographic Considerations:

-High Risk Vulnerability

Each state has the potential for flooding, freezing ice, tornados, etc. Earthquakes are potential disasters in Southeast Missouri and to a lesser extent along the Humboldt Fault, which trends from Omaha, Nebraska, southwest across Kansas to Oklahoma City, Oklahoma.

EPA Region VII in development of a worst-case scenario is listing a collection of suggestions and checklists to provide quick access to critical information to assist in formulating a facility's worst case discharge. This compilation is neither a textbook nor a substitute for training, qualified technical advice, or common sense. It only addresses response to oil spills that could reach water.

RESPONSE PRIORITIES

The following points should be considered when attempting to minimize effects of an oil spill.

Health and safety are the first priorities.

Pay attention to:

- Fire and explosion potential of vapors at or near the spill site.
- Potential toxic effects of the spill and chemical countermeasures.
- Proper use of safety equipment.
- Hyperthermia, hypothermia.
- Small boat safety.
- Helicopter and aircraft safety.

Speed is essential in recovery efforts

- Oil spreads and drifts rapidly.
- Evaporation rapidly increases oil viscosity.
- Oil can be burned more readily when fresh.
- Sustained Combustion requires at least 0.1 inch (2-3 mm) of slick thickness.
- Oil is usually easier to deal with in water than when it has contacted the shore.

CLEANUP PRIORITIES

The nine oil spill remediation steps are:

1. Stop the discharge.

2. Assess amount and type of spilled oil via surveillance and tracking.
3. Follow the procedures defined in the contingency plans, with modification as necessary. Document all actions.
4. Contain and remove spilled oil at the source.
5. Protect threatened resources and monitor shorebound oil.
6. Treat or contain and remove offshore oil that has escaped the primary control operation at the source.
7. Skim the oil that has pooled along the shore in natural collection areas such as sloughs and coves.
8. Clean up shorelines where oil has stranded, to the extent possible and advisable.
9. Dispose of collected materials.

SHORTFALLS

There are potential shortfalls which might occur in any type of oil spill response. Some of those shortfalls could be:

1. Equipment:
 - Logistics of staging and operating equipment
 - Limited availability of specialized equipment
2. Personnel: Additional personnel will come in from outside the area
3. Minimum response times: Delays in response due to the remoteness of the spill location

PROCEDURES AND CRITERIA FOR TERMINATING THE CLEANUP

EPA Region VII cleanup procedures will continue until the determination is made jointly by the Federal and State OSCs, Natural Resource Trustees, and Responsible Party decide to cease cleanup operations.

RESPONSE GUIDELINES ANNEX- Under development.

Region VII contains very diverse industries and ecological zones. A spill of one type and size might have a minor impact on one area and might be devastating in

another. Procedures on response guidelines will be written for Region VII, and incorporated into this plan.

SUMMARY

To prepare for the inevitable oil spill incident, the responder needs to know the characteristics of the size and type of possible occurrences. Looking at the spill history of an area is a good way to anticipate what is likely to happen in the future. All oil spills in violation of section 311(b)(3) of the CWA are to be reported to the **National Response Center (NRC) 1-800-424-8802**. When spills are reported, information is disseminated to the USCG/EPA Federal OSC where they occurred, for possible response actions. This mechanism for recording spills is labeled the **Emergency Response Notification System (ERNS)**. Researching the ERNS data for Region VII from 1988, and then separating out the oil-specific information, resulted in a listing of typical large oil spills within this region. States were also requested to submit their spill history data to help hypothesize a worst case discharge in this region.

CATEGORIES:

Specific spill categories were researched from the ERNS database in the four-state region. These categories are: pipelines, fixed facilities, highways, underground tanks, aboveground tanks and railways. Spill data on vessels was obtained from the USCG. (See Table II)

The following matrices (Tables I & II) show the oil spill history for the four states in Region VII. The data represent both technical and natural accidents. The data are taken from Federal and state records of spill history (see Appendix F) listed by source since 1988.

TABLE I. Oil Spill History for Iowa, Kansas, Missouri and Nebraska. (Since 1988)

STATE:	Iowa	Kansas	Missouri	Nebraska
SOURCE:				
Pipeline	12,000gal/ No. 2 Fuel Oil	165,000 gal/Crude Oil	864,000gal/C rude Oil	40,000 gal/JP-4 Jet Fuel
Fixed Facility	38,830gal/ Diesel	44,000/Crud e Oil	20,000 gal/ Gasoline	3,000 gal/ Diesel
Highway	9,000gal/ Gasoline	35,000 lbs/VAC-10 Asphalt	20,000gal/ Gasoline	8,800gal/ Gasoline
Underground Tank	10,000gal/ Gasoline	1,780gal/ No. 2 Diesel Fuel	11,000/ No. 2 Fuel Oil	4,500gal/ Unleaded Gasoline
Above Ground Tank	29,480gal/ Gasoline	4,135gal/ Gasoline	20,000gal/ Diesel	765,795gal/ No. 2 Fuel
Railway	4,000gal/ No. 2 Diesel Fuel	5,500gal/ Gas Oil	23,000gal/ Petroleum	270 Tons/ Coal Tar

Source: ERNS Database & State Spill History, see Appendix F.

Below is a table representing the worst case discharge possibility for a vessel on the Mississippi or Missouri River.

Table II. Worst Case Discharge - Vessel

	Capacity	Contents
Mississippi River	Maximum: 27,000 Barrels/Barge Barges = usually 12 barges, Maximum = 20, up river	
Missouri River	Maximum: 23,000 Barrels/Barge	Fuel oil, asphalt, & caustic soda

Source: USCG

Revision 1
December, 1994

I. Adequacy to Remove a Worst Case Discharge

This ACP, when implemented in conjunction with the NCP, is adequate to mitigate and/or prevent a substantial threat of a worst case discharge. Private industry and local emergency responders provide the front-line defense in response to all spills, including a worst case discharge.

1. Facility Response Plans

Certain facilities--those which pose a significant and substantial threat to the environment, in order to be granted approval to operate without an approved FRP, have provided certification that they have, by contracts or approved means, the resources capable of removing a worst case discharge (WCD) from their facility. In Region VII, all of the facilities that have been determined to pose such a risk have provided an adequate certification. All FRPs will be reviewed for approval, which will include adequate resources to remove a facility WCD. Among the requirements for approval, Facility Response Plans will also be required to be consistent with the NCP and ACP, and should be consistent with local emergency plans, prepared under the EPCRA.

2. Local Emergency Plans

The authority and responsibility for planning and exercising local emergency plans is vested at the local government level, through requirements of EPCRA. The State, localities and industry have the most detailed knowledge of the local area and the situation at risk. Accordingly, LEPCs are in the best position to develop plans which adequately address hazards in their community. Future Area Committee membership and participation will be solicited from LEPCs and appropriate local responders.

Adequacy to remove a worst case discharge is currently addressed through existing contingency plans and guidance manuals. Among these is the RCP, which outlines federal resources available to the OSC from RRT agencies, as well as Regional response policies. The local emergency contingency plan outlines resources available from outside of RRT agencies response protocols are outlined in the RCP. This ACP also lists resources which are not found in any of the referenced plans.

The different categories of worst case discharges are outlined in Tables I & II. In assessing the adequacy of removal of these, the equipment section of this plan (Appendix C.2) includes contractors from outside of the state which may be accessed for additional equipment.

In terms of prevention of an oil spill, including a worst case discharge, the Spill Prevention Control and Countermeasures (SPCC) Program, administered through EPA, requires all non-transportation-related facilities within EPA's jurisdiction, to develop plans necessary to contain a discharge of oil and prevent it from reaching navigable waters. This program is much broader than contingency planning. It requires facilities to develop and design plans that include the installation of equipment, most notably secondary containment systems, such as dikes, barriers and diversionary flow paths, so that spills into waters of the United States will be prevented.

When such design and engineering controls are not practicable for a facility, the owner must provide a detailed contingency plan following the criteria outlined in 40 C.F.R. Part 109. Some of these criteria include the establishment of notification procedures, identification of resources, and provisions for specific actions. For transportation-related onshore and offshore facilities, such as vessels, the Department of Transportation (DOT) issues regulations concerning the safe handling of hazardous materials. The Minerals Management Service of the Department of the Interior is also responsible for certain offshore fixed facilities.

In order to check the adequacy of a facility to remove a worst case discharge, the Federal lead agency, EPA or USCG, shall periodically conduct drills of removal capability, without prior notice, in areas for which ACPs are required and under relevant tank vessel and facility response plans. The drills are to be conducted under the *National Preparedness for Response Exercise Program (PREP)*, and may include participation by Federal, State, and local agencies, the owners and operators of vessels and facilities in the area, and private industry.

This ACP shall integrate approved vessel, offshore facility, onshore facility, pipeline, and bulk transportation response plans. The structure that currently is the basis for integration of inland and coastal ACPs is the RRT. Regional response policies and preparedness

activities, concerning both inland and coastal issues, are currently addressed through the RRT, and outlined in the RCP, which is approved by BOTH the EPA and USCG co-chairs.

IV. OPERATIONAL RESPONSE PHASES FOR OIL REMOVAL

A. Response

The phases of operational response for oil, including: (1) discovery and notification, (2) preliminary assessment and initiation of action, (3) containment, countermeasures, cleanup, and disposal, and (4) documentation and cost recovery, are outlined in the NCP. (40 C.F.R. §§ 300.300 - 300.320). The relationship of the Federal agencies (RRT) is described in the RCP.

OPA 90 provides additional authority for carrying out a response. Under Section 311(c) of the CWA, the OSC as the President's designate may:

1. remove or arrange for the removal of a discharge and mitigate or prevent a substantial threat of a discharge, at any time;
2. direct or monitor all Federal, State, and private actions to remove a discharge; and
3. remove and, if necessary, destroy a vessel discharging, or threatening to discharge, by whatever means are available.

Furthermore, if a discharge results in a substantial threat to the public health or welfare of the United States (including but not limited to fish, shellfish, wildlife, other natural resources, and the public and private beaches and shorelines of the United States), the OSC shall direct all Federal, State, and private actions to remove the discharge or to mitigate or prevent the threat of a discharge.

B. Fish and Wildlife Response Plan

OPA 90 amended Section 311(d) of the CWA, 33 U.S.C. § 1321(d), to include a fish and wildlife response plan, developed in consultation with the USFWS, NOAA, and other interested parties (including State fish and wildlife conservation officials), for the immediate and effective protection, rescue, and rehabilitation of, and the minimization of risk of damage to, fish and wildlife

resources and their habitat that are harmed or that may be jeopardized by a discharge.

See Appendix A.1 of the ACP for the Fish and Wildlife and Sensitive Environments Plan.

C. Funding

The OPA effectively permits many other Federal agencies, the States and Indian Tribes access to the Oil Spill Liability Trust Fund (OSLTF) for a variety of purposes. The Fund can be used following an incident for removal actions, natural resource issues, and damages. Access to the Fund is partially governed by OPA 90, 33 U.S.C. § 2712. Local, State, tribal, or Federal agencies may get funding for removal costs through the Federal OSC or by submitting a claim.

There are six basic categories of recoverable damages: (1) natural resource damages; (2) damages to real and personal property, including the loss of such property; (3) loss of subsistence use of natural resources; (4) loss of tax and other revenues; (5) loss of profit or earning capacity; and (6) increased cost of public services- are receivable only by governments. The other categories are receivable by private parties as well as by governments.

The NPFC, which is responsible for implementing the Fund, may be accessed through the NRC.

Liability Limitations:

OPA 90 sets limits of liability that apply to all removal costs and damages sought under OPA 90. The limits may be adjusted for inflation every 3 years based upon the consumer price index. The limits set by OPA 90 are:

- Tank vessels: \$1,200 per gross ton; \$10 million if greater than 3,000 gross tons; \$2 million if 3,000 gross tons or less;
- Any other vessel: \$600 per gross ton or \$500,000 whichever is greater;
- Offshore facility except Deep Water Ports: the total of all removal costs plus \$75,000,000;

- Onshore facility and Deep Water Port: \$350,000,000.
33 U.S.C. § 2704.

There are certain exceptions to these limits of liability. These limits do not apply:

- If the incident was caused by gross negligence or willful misconduct;
- If the incident was a result of a violation of applicable Federal safety, construction, or operating regulations; or
- If the responsible party fails to report the incident, provide all reasonable cooperation and assistance required by a response official or without sufficient cause fails to comply with an order issued by the Federal OSC. [33 U.S.C. § 2704(c)(1)(2)].

In addition, OPA 90 does not preempt State laws regarding liability, so in areas where State law places a higher limit, compensation for damages up to the liability limit established by the State law may be pursued.

State Access to the fund:

Coast Guard Commandant Instruction 16465.1 defines documentation for enforcement and cost recovery under 33 U.S.C. § 2712(d). (See *Technical Operating Procedures for State Access Under Section 1012(d)(1) of the OPA* (Enclosure (1) to NPFCINST 16451.1)).

Under development: Details of requirements for documentation and cost recovery, Appendix E

OPA 90 allows the State governor to request payments of up to \$250,000 from the OSLTF for removal costs required for the immediate removal of a discharge, or the mitigation or prevention of a substantial threat of a discharge, of oil. Requests are made directly to the Federal OSC who will determine eligibility. A State that anticipates the need to access the Fund must advise the NPFC in writing of the specific individual who is designated to make requests. The designation must include the person's name, address, telephone number, and title or capacity in which employed.

Eligibility for State Access:

The OSC will determine whether the State has the ability to respond based on the criteria specified by the NPFC. If the State is capable, the OSC will contact the USCG case officer to authorize access to the fund. If the OSC denies State access to the fund, he/she will detail the reason for denying access (i.e., which of the criteria were not met by the State).

Required Recordkeeping:

The State shall maintain records of expenditures of fund monies including, but not limited to:

- Daily expenditures for each individual worker, giving the individual's name, title or position, activity performed, time on task, salary or hourly rate, travel costs, per diem, out-of-pocket or extraordinary expenses, and whether the individual is normally available for oil spill removal.
- Equipment purchased or rented each day, with the daily or hourly rate.
- Miscellaneous materials and expendable purchased each day.
- Daily contractor or consultant fees, including costs for their personnel and contractor-owned or rented equipment, as well as that of any subcontractor.

The State shall submit a copy of these records and a summary document, stating the total of all expenditures made, to the NPFC within 30 days after completion of the removal actions. A copy of these documents shall also be submitted to the Federal OSC.

State Access to Other Funds: under development.

V. HAZARDOUS SUBSTANCE RESPONSE

A. General

Subpart E of the NCP, 40 C.F.R. Part 300, Subpart E, establishes methods and criteria for determining the appropriate extent of response authorized by CERCLA and CWA.

In general, the OPA 90 fund is available primarily for the cleanup actions of an oil spill. The purposes of the fund are outlined in 33 U.S.C. § 2712.

CERCLA funds are available for the payment of removal costs for incidents involving hazardous substances, contaminants or pollutants.

B. Response

The relationship of the Federal agencies (RRT) is described in the RCP. In most instances, response personnel, equipment and resources involved in oil response and in hazardous substances response are the same for a given Area. Application of fund monies from CERCLA or OPA 90 may require evaluation after the cleanup based on the documentation obtained during the response. Additional detail regarding joint OPA 90 and CERCLA response is addressed in the RCP.

For hazardous substance response only, see appropriate EPCRA, SERC and LEPC HAZMAT response plans.

VI. STATE AND LOCAL INVOLVEMENT IN RESPONSE

A. General

Subpart F of the NCP addresses State involvement in hazardous substance response and is incorporated herein by reference. 40 C.F.R. Part 300, Subpart F. Every state governor is asked to assign an office or agency to represent the state on the RRT. The state's representative may participate fully in all facets of RRT activity and shall designate the appropriate element of the state government that would undertake direction of state-managed oil or hazardous substance releases. Each state RRT member also represents and coordinates the RRT involvement of various other state, county, and municipal organizations. The LEPCs are responsible for the development and maintenance of local emergency response plans in accordance with EPCRA, Sections 301 to 303. The local emergency response plan must be reviewed by a SERC. The RRTs may review the plans and provide assistance if the SERC or LEPC, through the State RRT representative, so requests. Federal contingency plans provide for coordination with local government organizations such as county and municipal governments. This is especially important for traffic control, land access, and disposal of oil or hazardous materials removed in response operations. State conservation departments, through their State's representative on the RRT, shall coordinate wildlife preservation measures for non-migratory animals. When necessary, the closing of areas to commercial fishing due to health hazards will be accomplished by the appropriate state agency. Migratory animals are coordinated with the U.S. Fish and Wildlife Service.

1. The State of Iowa

The Iowa Department of Natural Resources (IDNR) is the enforcement agency for the environmental laws in the State of Iowa and coordinates response to spills. If a threat to human safety exists in a pollution case, IDNR coordinates requested assistance from state agencies, and acts as the liaison with Federal officials. Agency personnel are available 24 hours a day for technical assistance to abate the exposure of citizens to hazardous materials, and for investigation of pollution incidents and assessment of environmental damages. IDNR can provide laboratory services and

water quality survey assistance. Request for disposal sites and incinerators for waste oil should be coordinated through this department which represents the state for all RRT activity.

The Iowa Department of Public Defense, Emergency Management Division, coordinates disaster response actions and provides guidance and assistance. In a response, the Division provides assistance to the lead agency and local government on coordinating relocation assistance and supporting evacuated citizens.

2. The State of Kansas

The Kansas Department of Health and Environment (KDHE) is the lead agency in the state for enforcement of environmental laws and response to oil and hazardous substances release incidents. A member of this department is the RRT representative.

3. The State of Missouri

The Missouri Department of Natural Resources (MDNR), Division of Environmental Quality, will provide response assistance on hazardous materials incidents and oil spills. A member of this department is the RRT representative.

4. The State of Nebraska

The Nebraska Department of Environmental Quality (NDEQ) will coordinate state responses to spills and can provide laboratory services and water quality survey assistance. A member of this department is the RRT representative.

NOTE: States are being asked to submit their local oil response capabilities and procedures to be annexed into this document.

B. EPA/State/Local MOA (MOU)

The Federal, State, and local MOAs (MOUs) may establish the nature and extent of EPA and State and local interaction during EPA-lead and State- or local-lead responses (including Indian tribes). EPA shall enter into MOU discussions if requested by a State or local government.

Refer to the NCP, 40 C.F.R. § 300.505, for a discussion of State MOUs.

Regional MOUs

Various MOUs and Interagency agreements (IAGs) between RRT member agencies are listed in the RCP under Annex VII, "Interagency Support Agreements." A copy of the USCG/EPA MOU is listed in Annex 1 of this Plan.

C. Requirements for State Involvement in Enforcement Responses and Site Remedy

[Reserved]

***Under development - enforcement procedures and protocols

D. State Involvement in EPA/USCG-lead Enforcement Negotiations

EPA/USCG shall notify States of response action negotiations to be conducted by EPA/USCG with potentially responsible parties during each fiscal year.

The State shall notify EPA/USCG of such negotiations in which it intends to participate.

The State is not foreclosed from signing a consent decree if it does not participate substantially in the negotiations.

E. State Involvement in Removal Actions

For Fund reimbursement, the State must fulfill requirements established by the NPFC including PRP determination and documentation requirements. See Appendix E (under development).

VII. TRUSTEES FOR NATURAL RESOURCES

The OSC shall ensure that the trustees for natural resources are promptly notified of discharges. The OSC shall coordinate all response activities with the affected natural resource trustees and shall consult with the affected trustees on the appropriate removal action to be taken. Where and when the OSC becomes aware that a discharge may affect any endangered or threatened species, or their habitat, the OSC shall consult with the appropriate natural resource trustee.

Designation of Trustees:

The President is required to designate in the NCP those Federal officials who are to act on behalf of the public as trustees for natural resources. Federal officials so designated will act on behalf of the public to restore natural resources which have been injured, lost or destroyed as a result of a hazardous substance release or oil discharge. As defined in Section 101(16) of CERCLA, and OPA section 1001.20, natural resources include: land, fish, wildlife, biota, air, water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the exclusive economic zone).

Federal

The following Federal officials have been designated by the president as trustees for natural resources within Region VII:

A. The Secretary of the Interior, including:

1. National Parks, National Monuments, National Historic Sites, National Recreation Areas, Wild and Scenic Rivers, etc.
2. U.S. Fish and Wildlife Service: National Wildlife Refuges, National Fish Hatcheries, Waterfowl Production Areas; migratory birds and endangered species.

3. Bureau of Reclamation: Lands and waters managed or protected in association with Reclamation dams, reservoirs, and water conveyance systems.

4. Bureau of Land Management: Public lands, Federally-owned minerals (underlying private as well as public lands).

5. Bureau of Indian Affairs: Indian Reservations, and other lands or natural resources held in trust for an Indian Tribe (including off-reservation natural resources).

Contact: DOI RRT Representative.

B. Secretary of Agriculture

1. U.S. Forest Service: national Forests, National Grasslands.

Contact: USDA/Forest Service RRT Representative.

C. Secretary of Defense

1. Military Lands

Contact: DOD U.S. Army RRT Representative.

2. Corps of Engineers Project Lands

Contact: USACE RRT Representative.

D. Secretary of Energy

DOE lands and facilities

Contact: DOE RRT Representative

Note: Refer to Appendix D.3 for RRT Representatives.

State

Natural resources under state jurisdiction include all fish, wildlife and biota (including a shared trusteeship with the federal government for certain plants and animals; air, surface and ground water, and land. State trustees for natural resources within Region VII are:

Iowa - Director of the Iowa Department of Natural Resources.

Kansas - Secretary of the Kansas Department of Health and Environment.

Missouri - Director of the Missouri Department of Natural Resources.

Nebraska - Director of the Nebraska Department of Environmental Quality.

Indian Tribes

The Tribal Chairman or head of the Tribal governing body, or person designated by tribal officials, acts as the trustee.

Natural resources under Indian Tribal trusteeship include lands and other natural resources belonging to, managed by, controlled by, or otherwise appertaining to the Tribe; or held in trust for the Tribe; or belonging to a member of the Tribe (if subject to a trust restriction on alienation).

Section 300.600 of the NCP designates the natural resources for which each Federal trustee is responsible, and is incorporated herein by reference. [40 C.F.R. § 300.600].

Pursuant to 33 U.S.C. § 2706(b), the governor of each State shall designate State and local officials who may act on behalf of the public as trustee for natural resources and shall notify the President of the designation.

The head of any foreign government may designate the trustee who shall act on behalf of that government as trustee for natural resources.

Function of Trustees:

Under 33 U.S.C. § 2706(c), natural resource trustees shall:

- Assess natural resource damages for the natural resources under their trusteeship; and
- Develop and implement a plan for the restoration, rehabilitation, replacement, or

acquisition of the equivalent, of the natural resources under their trusteeship.

The Secretary of the Interior shall also be trustee for those natural resources for which an Indian Tribe would otherwise act as trustee in those cases where the United States acts on behalf of the Indian Tribe.

VIII. PARTICIPATION BY OTHER PERSONS

Subpart H of the NCP, 40 C.F.R. § 300.700, addresses participation by other persons and is incorporated herein by reference.

Participation by private parties in both planning and response is encouraged. Potentially Responsible Parties (PRPs) are encouraged to undertake response actions in an adequate and timely manner, based on the judgement of the FOSC.

Landowners are also encouraged to participate in planning and response. The landowner is a valuable resource due to his/her local knowledge. The landowner, to the extent practical and based on the Federal OSC's judgement, may be included in the planning and response activities, under direction of the Federal OSC. Landowners that provide access to or are affected by a spill have jurisdiction over their lands, and warrant special consideration by the responding agency or unified command. In the event that an incident poses, or has the potential to pose, an imminent threat to human health and/or the environment, it is the best interest of the landowner to provide access to a Federal OSC.

In addition, OPA 90 authorized filing of claims against the Oil Spill Liability Trust Fund (OSLTF) by other persons. To file a claim, contact the Director, NPFC, Suite 1000, 4200 Wilson Boulevard, Arlington, VA 22203-1804, telephone (703) 235-4756.

Details on Area Committee non-governmental, ex-officio participants (e.g., industry, volunteer groups, landowners, etc.) are under development and will be provided in Appendix D.4 of the ACP. (under development)

IX. ADMINISTRATIVE RECORD FOR SELECTION OF RESPONSE ACTION

Subpart I of the NCP, 40 C.F.R. § 300.800, addresses administrative recordkeeping for selection of response actions and is incorporated herein by reference to the extent that it applies to emergency response.

Revision 1
December, 1994

X. CHEMICAL COUNTERMEASURES

Subpart J of the NCP, 40 C.F.R. § 300.900, addresses the use of dispersants and other chemical countermeasures, and is incorporated herein by reference. In addition, Section 311(j) of the CWA requires that each Area Committee work with State and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

Subpart J, 300.900 of the Region VII, Regional Contingency Plan states that Region VII does not promote the use of dispersants, other oil emulsifiers, surface collecting agents, biological additives, burning agents or miscellaneous oil spill control agents on surface water, particularly near sensitive wetlands or water supplies (freshwater systems). The rest of Subpart J, 300.900 is herein referenced to the extent that it is also observed by this ACP.

XI. FEDERAL FACILITIES**[RESERVED]**

Revision 1
December, 1994

APPENDIX A

- 1. FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS PLAN**
- 2. ENVIRONMENTALLY SENSITIVE AREAS**
- 3. ECONOMICALLY SENSITIVE AREAS**
 - A.3.a. Region VII Surface Water Intakes**
 - A.3.b. Missouri and Mississippi River Water Intakes**
- 4. METROPOLITAN STATISTICAL AREAS (MSAs)**

APPENDIX A.1

FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS PLAN

Revision 1
December, 1994

FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS PLAN
REGION VII AREA CONTINGENCY PLAN

**FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS PLAN
REGION VII AREA CONTINGENCY PLAN**

Table of Contents

1.0	PURPOSE	1
2.0	SCOPE	1
3.0	OBJECTIVES	1
3.1	Identify and Establish Priorities for Resources at Risk	1
3.2	Determine Environmental Effects of Response and Countermeasures	2
3.3	Identify Fish and Wildlife Response Capabilities	2
3.4	Evaluate the Interface of the ACP with Non-Federal Plans	2
4.0	PRIORITIZATION OF RESOURCES AT RISK	2
4.1	Notification of and Consultation with Natural Resource Trustees	2
4.2	Consultation with Natural Resource Managers	3
4.3	Regional Description and Sensitive Areas	4
4.3.1	Threatened and Endangered Species	4
4.3.2	Freshwater Environments	4
4.4	Areas of Economic Significance	6
5.0	DETERMINING THE ENVIRONMENTAL EFFECTS OF RESPONSE AND - COUNTERMEASURES	6
5.1	Impacts of Response Methods on Sensitive Environments and Habitats	7
5.2	Appropriate Response for Specific Sensitive Environments and Habitats	7
5.3	Monitoring Response Effectiveness - Monitoring Plans [under development]	9
5.3.1	Monitoring Plan [under development]	9

**FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS
REGION VII AREA CONTINGENCY PLAN**

**Table of Contents
(Continued)**

6.0	FISH AND WILDLIFE RESPONSE CAPABILITIES	9
6.1	Technical Expertise and Assistance	9
6.2	Wildlife Protection	10
6.3	Wildlife Rescue and Rehabilitation	10
6.4	Other Roles and Responsibilities of Natural Resource Trustees	15
7.0	EVALUATING THE INTERFACE OF THE ACP WITH NON-FEDERAL PLANS	16

LIST OF TABLES

Table 1	RELATIVE IMPACT OF RESPONSE METHODS IN THE ABSENCE OF OIL	8
---------	--	---

LIST OF FIGURES

Figure 1	PROTECTION PRIORITIES MECHANISM [under development] ..	4
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LIST OF ATTACHMENTS

Attachment 1	WILDLIFE DAMAGE MANAGEMENT EQUIPMENT SUPPLIERS	
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1.0 PURPOSE

Oil or hazardous substances spilled into the environment may have a wide range of ecological consequences. The severity of the consequences varies depending on the material spilled and the ability of the ecosystem to degrade or resist the spilled product. Reducing the overall ecological impact of a spill event and the impacts associated with response activities is the goal of this Fish and Wildlife and Sensitive Environments Plan (FWSEP, also referred to as 'annex').

The purpose of this annex is to provide the Federal On Scene Coordinators (OSC) in U.S. EPA Region VII (Region VII) with the information he/she needs to identify sensitive environments and provide appropriate response strategies for limiting the overall negative environmental effects of a spill. The annex will also aid in the development of Facility Response Plans required by 40 CFR 112.20.

2.0 SCOPE

The Region VII FWSEP develops a general overview of the sensitive areas and provides the OSC with information to assist in the sensitive environment identification process. Deciding on response techniques before a spill occurs is imperative to provide for a coordinated, immediate and effective response. The FWSEP aids in the selection of the appropriate spill protection, recovery and cleanup techniques that will help to minimize the ecological impacts of a spill.

The task of identifying all the environmentally sensitive areas in Region VII and prioritizing them is an enormous undertaking, and will be done gradually. The FWSEP helps to identify sensitive environments that could be impacted by spills into water bodies within the Region.

The FWSEP also establishes procedures and policy for meeting the objectives set forth in the National Contingency Plan (NCP); and should be used to aid responders and planners in prioritizing and evaluating response techniques for spills in various freshwater environments and shoreline habitats. This annex aids the Area Committee in identifying special areas of concern. Those special areas of concern will be examined in detail in the Sub-Area planning phase of the Area Contingency Plan (ACP) development.

3.0 OBJECTIVES

The National Contingency Plan (40 CFR §300.210(c)(4)(i)) delineates the objectives of this annex. The objectives have been organized into four general sections:

3.1 Identify and Establish Priorities for Resources at Risk

Natural resources, other sensitive resources, and appropriate resource trustees are identified. Agencies to be notified and consulted in establishing incident-specific priorities for the protection of these resources are provided. Sensitive resources identified include environmentally sensitive lands, freshwater environments, and areas of economic significance (Section 4.0).

3.2 Determine Environmental Effects of Response and Countermeasures

The probable impacts of various response methods on general environments and habitats are provided. Methods for determining and approving the appropriate response techniques for specific environments and habitats, and monitoring the effectiveness of response activities are outlined (Section 5.0).

3.3 Identify Fish and Wildlife Response Capabilities

State and Federal response capabilities and the contacts for permitting wildlife rescue and rehabilitation are outlined. Prearranging and acquiring the appropriate response equipment, personnel and mutual aid agreements and defining the OSHA training requirements for volunteers assigned to fish and wildlife rescue are also discussed (Section 6.0).

3.4 Evaluate the Interface of the ACP with Non-Federal Plans

The compatibility of this annex with non-Federal response plans on issues affecting fish, wildlife, their habitats and sensitive environments is evaluated (Section 7.0).

4.0 PRIORITIZATION OF RESOURCES AT RISK

To ensure that proper measures are taken to minimize the impacts of a spill on ecological and economic resources, the OSC or Responsible Party must be aware of sensitive environments and/or important resource areas. Identifying sensitive areas should be accomplished before a spill event occurs. Environmentally sensitive areas were identified by the various Natural Resource Trustees and other natural resource management agencies. Response strategies vary depending on the material spilled and the spill location. It is critical that responders realize that an immediate, but improper response, may be more damaging than waiting for the mobilization of a proper response. Critical to choosing an appropriate response is understanding the aquatic environments and habitats, and their seasonal sensitivities relative to one another.

4.1 Notification of and Consultation with Natural Resource Trustees

Prompt notification of and consultation with the natural resource trustees and other natural resource management agencies is imperative so that their expertise can be utilized in identifying and

protecting sensitive environments.

Pursuant to Subpart G of the National Contingency Plan, the following agencies have been designated as trustees for natural resources:

Department of the Interior

Department of Agriculture, Forest Service

Department of Defense

Department of Energy

Kansas Department of Health and Environment

Nebraska Department of Environmental Quality

Iowa Department of Natural Resources

Missouri Department of Natural Resources

Appropriate contacts within these agencies are included in Appendix D.

4.2 Consultation with Natural Resource Managers

In addition to the designated natural resource trustees, there are numerous Federal and State agencies with land and resource management responsibilities and/or expertise which need to be consulted regarding removal actions:

Department of the Interior

- U.S. Fish and Wildlife Service (USFWS)
- National Park Service

Department of Agriculture

- Forest Service

State of Iowa

- Department of Natural Resources

State of Kansas

- Wildlife and Parks Department

State of Nebraska

- Game and Parks Commission
- Natural Resources Commission
- Department of Water Resources

State of Missouri

- Department of Natural Resources
- Department of Conservation

Appropriate contacts within these agencies are included in Appendix D.

Figure 1: Protection Priorities Mechanism [To aid in establishing protection priorities, a flow chart outlining the sensitive resources and the appropriate contacts will be developed.]

4.3 Regional Description and Sensitive Areas

There are many national and state wildlife refuges, fish hatcheries, and wild and scenic river reaches, Federal water fowl production areas, state wildlife management areas, national and state parks, monuments, preserves, recreational areas, primitive archaeological and historical sites, heritage program areas and other important resources located on or near the rivers and lakes of Region VII.

Appendix A divides the Region by state and lists threatened and endangered species, critical habitats, environmentally sensitive areas, recreation areas, public and private water intakes. The Natural Resource Trustee or other contact is listed in Appendix D, and the phone numbers for contacts who should be notified and consulted. The appendix can be used by responders to quickly identify the location of sensitive areas.

4.3.1 Threatened and Endangered Species

Threatened and endangered (T&E) species inhabit or are located near, almost every major body of water in Region VII. The USFWS provides an updated list of T&E species by county for the Region annually.

4.3.2 Freshwater Environments

Freshwater environments can be divided into three broad categories: standing water, such as lakes and ponds; and flowing water, which includes streams and rivers; and wetlands.

Lakes and ponds

The near shore areas of standing freshwater environments typically support diverse and abundant aquatic plant and animal communities. Because of the water's relative stillness, spilled oil would tend to collect and not be dispersed by wind, waves or currents. However, wind could disperse oil in a large pond or lake to areas along the shoreline, such as emergent marshes. Lakes, ponds and their dependent populations are, therefore, more vulnerable to an oil spill than freshwater environments that are constantly moving, such as streams and rivers.

Streams and Rivers

Oil entering a stream or river will typically move downstream. Oil entering slower flowing streams tends to remain on the surface while oil discharged to a high velocity turbulent stream disperses throughout the entire stream water column. As a result of the turbulent agitation, oil may become trapped in sediment along the stream bed, resulting in mortality to benthic organisms.

Stream reaches can be subdivided into three categories: low gradient; moderate gradient; and high gradient.

- **Low gradient** portions of a stream are characterized by: meandering channels; moderate currents; wide zones of associated riparian vegetation; sand bars; intermediate oil residence time; numerous collection sites; and restricted mixing into the water column.
- **Moderate gradient** portions of a stream are characterized by: intermittent rapids; moderately wide channels; associated riparian vegetation; brisk currents; sand and gravel bars; short oil residence time; few collection sites; and significant mixing into the water column.
- **High gradient** portions of a stream are characterized by: numerous rapids; narrow associated riparian vegetation; strong currents; coarse gravel sediments; short oil residence time; no collection sites; and intense mixing into the water column.

Wetlands

Wetlands are highly sensitive to oil spills. Wetlands such as freshwater swamps, marshes and prairie potholes act as natural hatcheries, migratory bird and aquatic furbearer brood-rearing and feeding areas, and watering areas for terrestrial and aquatic wildlife. Therefore, they are crucial areas for wildlife support.

The Region's seasonality is a major consideration in preparing and planning for a response. Ice and snow in the winter, fluctuations of river and stream water levels, and the migratory patterns of wildlife all need to be addressed.

The classification of environmentally sensitive areas, their administering agencies and the statutory authority include, but are not limited to:

- **Critical Areas under the Clean Lakes Program** [EPA, States, section 314 Clean Water Act, (33 USC §1324)];
- **Critical Habitats for Federal Designated Endangered or Threatened Species** [USFWS, Endangered Species ACT, (16 USC §1531, *et seq.*; 50 CFR 424.02)];

- **Designated Federal Wilderness Areas** [BLM, USFS, NPS, USFWS, National Wilderness Preservation Act (16 USC §1131, *et seq.*)];
- **Federal Designated or Proposed Endangered or Threatened Species** [USFWS, Endangered Species Act (16 USC §1531, *et seq.*; 50 CFR 424.02)]
- **Federal and State Designated Wild and Scenic Rivers** [BLM, USFS, NPS, USFWS, States, National Wild and Scenic Rivers Act, (16 USC §§1271-1287)];
- **National Conservation Areas** [USFWS, Refuge Recreation Act, (16 USC § 460k, *et seq.*)];
- **National Wildlife Refuges** [USFWS, National Wildlife Refuge Administration Act of 1966 (16 USC §§ 668dd-668ee) or comparable state law];
- **National Parks, National Monuments, National Lakeshore Recreational Areas** [NPS, Act of August 25, 1916 (16 USC §1, *et seq.*)];
- **Waterfowl Management Areas** are designated for the protection of habitat important to waterfowl and are designated within the states' **Wildlife Management Areas**;
- Other areas of concern are wetlands which generally include swamps, marshes, bogs and similar areas. Wetlands are defined in 40 CFR 230.3 and by USFWS. **Wetland Management Areas** administered by the USFWS are crucial habitats for waterfowl production.

[Relevant State statutes to be added.]

4.4 Areas of Economic Significance

Responders need to identify and protect areas of economic importance. Public drinking water intakes, industrial water users, aquaculture sites and agricultural water users could be adversely impacted by a discharge of oil or other hazardous materials. Water intakes in shallow lakes and rivers are at greatest risk to an oil spill. Timely response procedures which identify water users and notify them of an on coming spill is imperative. With prompt notification, water intakes/diversions can be shut down or boomed off. Water users other than municipal drinking water intakes are still being identified.

Tourism is also of importance with numerous important fishing streams, boating and canoeing areas, and other recreational activities associated with the Region's rivers and lakes. Identifying and protecting these economic resources is critical to response considerations.

5.0 DETERMINING THE ENVIRONMENTAL EFFECTS OF RESPONSE AND COUNTERMEASURES

Decisions on appropriate response and countermeasures should take into account the relative impact of response methods on sensitive areas. Using the information collected on downstream sensitive areas and spill response guidelines, informed decisions on appropriate protective measures can be made. When deciding on a method of response, the most important consideration should be the effectiveness of protecting habitats and removing spills of oil or other hazardous materials.

5.1 Impacts of Response Methods on Sensitive Environments and Habitats

The American Petroleum Institute and the National Oceanic and Atmospheric Administration (API/NOAA) collaborated on a study for Inland Oil Spills and finalized their findings in May of 1994. This is the first comprehensive guidance on responding to freshwater inland spills. API/NOAA classified specific oil response methods and their relative impacts on given environments and habitats. Physical, chemical and biological response methods are discussed and response impacts on the environment are classified as low impact, moderate impact, high impact and ineffective or inapplicable.

Table 1, taken from the API/NOAA document, includes the findings for response method impacts on water environments and shoreline habitats.

5.2 Appropriate Response for Specific Sensitive Environments and Habitats

Many of the issues dealing with appropriate response methods will be addressed in detail during the Sub-Area Planning. Response sections of Sub-Area plans will include:

- Identifying specific areas of concern throughout the region and pre-planning for the products most commonly spilled and the locations where spills most commonly occur;
- Response methods for habitats and sensitive areas using the API/NOAA guidance, *Options for Minimizing the Environmental Impacts of Freshwater Spill Response*;
- Pre-approving appropriate removal actions including the use of chemicals and dispersants per 40 CFR Subpart J - Use of Dispersant and Other Chemicals, §300.910.
- Locating access points, staging areas and boom anchor locations.

[Note - Additional guidance on response techniques is under development.]

RELATIVE IMPACT OF RESPONSE METHODS IN THE ABSENCE OF OIL

Source: API/NOAA 1994

RESPONSE METHOD	WATER ENVIRONMENT				SHORELINE HABITAT							
	Open Water	Small Lakes/Ponds	Large Rivers	Small Rivers/Streams	Bedrock	Man-made	Sand	Vegetated Shores	Sand and Gravel	Gravel	Mud	Wetlands
PHYSICAL RESPONSE METHODS												
Natural Recovery	-	-	-	-	-	-	-	-	-	-	-	-
Booming	L	L	L	L	-	-	-	-	-	-	-	-
Skimming	L	L	L	L	-	-	-	-	-	-	-	-
Barriers/Berms	-	-	-	H	-	-	-	-	-	-	-	-
Physical Herding	L	L	L	L	-	-	-	-	-	-	-	-
Manual Oil Removal/Cleaning	L	H	L	M	L	L	L	H	M	M	H	H
Mechanical Removal	L	H	H	H	-	M	M	H	M	M	H	H
Sorbents	L	L	L	L	L	L	L	L	L	L	M	M
Vacuum	L	L	L	L	L	L	L	M	L	L	H	M
Debris Removal	-	L	L	L	L	L	L	L	L	L	M	M
Sediment Reworking	-	H	-	H	-	-	M	H	M	M	H	H
Vegetation Removal	L	H	M	H	-	-	-	H	-	-	-	H
In-situ Burning	L	M	L	M	L	L	M	M	M	M	H	M
Flooding	-	-	-	-	L	L	L	L	M	L	L	L
Low-Pressure, Cold-Water Flushing	-	-	-	-	L	L	M	L	L	M	H	L
High-Pressure, Cold-Water Flushing	-	-	-	-	L	L	H	H	H	H	H	H
Low-Pressure Hot-Water Flushing	-	-	-	-	M	L	H	H	M	M	H	H
High-Pressure, Hot-Water Flushing	-	-	-	-	M	L	H	H	H	H	H	H
Steam Cleaning	-	-	-	-	M	L	H	H	M	M	H	H
Sand Blasting	-	-	-	-	H	M	-	-	-	-	-	-
CHEMICAL RESPONSE METHODS												
Dispersants	L	H	L	H	-	-	-	-	-	-	-	-
Demulsifiers	L	L	L	M	-	-	-	-	-	-	-	-
Visco-Elastic Agents	L	M	L	L	-	-	-	-	-	-	-	-
Herding Agents	L	M	L	H	-	-	-	-	-	-	-	-
Solidifiers	L	L	L	L	L	L	M	M	M	L	M	M
Chemical Shoreline Pretreatment	-	-	-	-	I	I	I	I	I	I	I	I
Shoreline Cleaners	-	-	-	-	M	L	M	I	M	M	M	I
BIOLOGICAL RESPONSE METHODS												
Nutrient Enrichment	L	M	L	L	L	L	L	L	L	L	L	L
Natural Microbe Seeding	I	I	I	I	I	I	I	I	I	I	I	I

L = Low; M = Moderate; H = High; I = Incomplete Information; "-" = Ineffective or Inapplicable for Habitat.

5.3 Monitoring Response Effectiveness - Monitoring Plans

An oil spill is dynamic and cleanup efforts must change as conditions change. Over time, the oil will spread, move downstream and weather. Climatic and geographic conditions may also change. A continual monitoring program to ensure the maximum removal of oil and protection of the environment throughout the duration of the cleanup is essential.

The OSC, in consultation with the natural resource trustees and the responsible party, will monitor the effectiveness of response activities in protecting sensitive habitats and removing discharges of oil or releases of hazardous substances. The OSC will consult with natural resource trustees and natural resource agency managers regarding the need for and methods of an incident-specific long-term monitoring plan. Efforts to control, contain and clean up the oil typically involve a number of containment and recovery methods. These methods may include booms, barriers, skimmers, sorbents, chemical agents, and manual recovery. As each of these methods has limitations associated with them, continued monitoring is necessary to ensure a successful cleanup. Monitoring will also be necessary to ensure that ecological impacts associated with the response actions do not cause more harm than good. Monitoring activities may include visual observation, sampling, data collection and evaluation, and replacement of saturated or defective material. Consultation with the natural resource agencies is essential to minimize injury to fish and wildlife and their habitats or other sensitive environments.

5.3.1 Monitoring Plan [Outline to be developed]

6.0 FISH AND WILDLIFE RESPONSE CAPABILITIES

In addition to consultation and coordination with natural resource trustees and other natural resource management agencies during the pre-spill planning phase to identify and understand potential natural resource concerns, consultation and coordination with these agencies during the response is also essential. Fish and wildlife response capabilities include:

6.1 Technical Expertise and Assistance

During a response, natural resource trustees and managers will provide technical assistance and expertise on potential effects of oil on fish and wildlife and their habitats or other sensitive environments that can be found in the impacted area. They are familiar with the area or habitats affected and are able to provide recommendations on the best locations for staging areas, access points, or anchor locations. They will recommend specific habitats where protective measures should be taken and provide advice on response actions to be taken. They can assist in the development of a monitoring plan and subsequent collection of data. Finally, the U.S. Fish and Wildlife Service and the State wildlife agency will direct or provide oversight for the protection, rescue, and rehabilitation of fisheries and wildlife.

6.2 Wildlife Protection

When an oil spill occurs, natural resource trustees or managers will provide timely advice on the necessary measures to protect wildlife from exposure to oil and the priority and timing of such measures. Protective measures may include all or a combination of the following:

- **prevent** the oil from reaching areas where migratory birds and other wildlife are located by either containing or recovering the oil, or
- **deter** birds or other wildlife from entering areas already affected by oil by using wildlife hazing devices or methods.

Wildlife hazing devices or methods are generally grouped into visual or auditory, or a combination of both. The types of equipment used and where they can be obtained can be found in Attachment 1. In an emergency, the USFWS, the State wildlife agency, or a local animal damage control agent may be able to locate and provide this equipment.

6.3 Wildlife Rescue and Rehabilitation

If exposure of birds and other wildlife to oil cannot be prevented, an immediate decision will need to be made whether to capture and rehabilitate oiled birds and other wildlife. The Department of the Interior (DOI) has statutory responsibilities for the protection of migratory birds and Federally-listed threatened and endangered species, which are carried out by the USFWS. If animals other than migratory birds or Federally-listed threatened or endangered species are found injured, the responsible agency would typically be the State wildlife agency. The decision to rescue and rehabilitate oiled wildlife **must** be made in consultation with the applicable State and Federal natural resource agencies as State and Federal permits are required by law.

State and Federal permits are required to collect, possess, treat and band migratory birds and threatened and endangered species. The laws and regulations that require such permits are as follows:

Migratory Bird Treaty Act of 1918, as amended, 16 U.S.C. 703 et seq - No person shall take, possess, import, export, transport, sell, purchase or barter, any migratory bird, or the parts, nests, or eggs of such bird **except as permitted** under the terms of a valid permit issued by U.S. Fish and Wildlife Service pursuant to the provisions of 50 CFR 21 and 50 CFR 13. Enforcement authority and penalties for violations are provided.

Bald Eagle Protection Act of 1940, as amended, 16 U.S.C. 668 et seq - No person shall take, possess, or transport any bald eagle or any golden eagle, or the parts, nests, or eggs of such birds **except as permitted** under the terms of a valid permit issued by USFWS pursuant to 50 CFR 22 and 50 CFR 13. Enforcement authority and penalties

for violations are provided.

Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq - It is unlawful for any person to commit, attempt to commit, solicit another to commit, or cause to be committed the import or export, take, possession, sale or offer for sale any endangered species **except as permitted** under the terms of a valid permit issued by the U.S. Fish and Wildlife Service pursuant to 50 CFR 17. Enforcement authority and penalties for violations are provided.

[Relevant State laws are to be added].

If rescue and rehabilitation efforts are deemed worthwhile, one Federal permit is required for oiled migratory birds and one Federal permit is required for oiled threatened and endangered species. Each of these permits may encompass more than one species. If a bird is considered a migratory bird, but is also a threatened or endangered species, it should be listed under the threatened and endangered species permit.

USFWS personnel will handle all federal permit activities through the field office responsible for the area where the spill occurs. State permits must be handled through the applicable state agency office. The permit issuing offices for Region VII are:

Iowa	U.S. Fish and Wildlife Service 4469 48th Avenue Court Rock Island, Illinois 61201	309-793-5800 Fax: 793-5804
	Iowa Department of Natural Resources Licensing Bureau Wallace State Building East 9th and Grand Street Des Moines, Iowa 50319-0035	515-281-5638 Fax 281-6794
Kansas	U.S. Fish and Wildlife Service 315 Houston, Suite E Manhattan, Kansas 66502	913-539-3474 Fax 539-8567
	Division of Fisheries and Wildlife Kansas Dept. of Wildlife and Parks 512 Southeast 25th Avenue Pratt, Kansas 67124-8174	316-672-5911 Fax 672-6020
Missouri	U.S. Fish and Wildlife Service 608 Cherry Columbia, Missouri 65201-7712 Wildlife Division	314-876-1911 Fax 876-1914

Missouri Department of Conservation
P.O. Box 180
Jefferson City, Missouri 65102

314-751-4115
Ext. 150
Fax 526-4663

Nebraska U.S. Fish and Wildlife Service
203 West Second Street
Federal Building, 2nd Floor
Grand Island, Nebraska 68801

308-382-6468
Fax 384-8835

Law Enforcement Division
Nebraska Game and Parks Commission
2200 North 33rd Street
Lincoln, Nebraska 68503

402-471-0641
Fax 471-5528

All rescue and rehabilitation efforts will be directed by the USFWS and the State wildlife agency, including the notification of a qualified wildlife rehabilitation organization and obtaining the necessary permits. The following criteria will be used by the USFWS and State wildlife agencies in selecting a rehabilitator:

Guidelines for Selection of Wildlife Rehabilitator

- Wildlife rehabilitator must have, or be able to obtain, the appropriate Federal and State permits and licenses to collect, possess, treat, and band migratory birds or threatened and endangered species.
- Wildlife rehabilitator must demonstrate high standards of practice, treatment, conduct, and ethics as reflected by organization such as the National Wildlife Rehabilitator Association, the American Veterinarian Association and the American Society for Prevention of Cruelty to Animals.
- Wildlife rehabilitator must have adequate liability insurance to protect both staff and volunteers.
- Wildlife rehabilitator should have a proven record and experience in rescue and rehabilitation of oiled wildlife.
- Wildlife rehabilitator must comply with all applicable Federal (Occupational Safety and Health Administration, etc.) and state safety regulations to protect staff and volunteers.

Two organizations, International Bird Rescue in Berkeley, California, and Tri-State Bird Rescue and Research, Inc. in Newark, Delaware, have become recognized experts in oiled bird rehabilitation:

Tri-State Bird Rescue and Research, Inc.
110 Possum Hollow Road
Newark, Delaware 19711

302-737-7241
Fax 302-737-9562
24 hr pager
800-710-0695 or 0696

International Bird Rescue Research Center
699 Potter Street
Berkeley, California 94710

510-841-9086
Fax 510-841-9089

Both organizations have extensive experience in bird rescue and rehabilitation and have worked both with government and industry. In addition, other more local, less well known bird rehabilitation organizations may also have such expertise in this area. Veterinarians and researchers from USFWS, other federal agencies, and state wildlife agencies and universities may also provide assistance and expertise during rehabilitation efforts.

All rescue and rehabilitation efforts will be directed by the USFWS and the State wildlife agency, including the notification of a qualified wildlife rehabilitation organization and obtaining the necessary permits.

Health and Safety Concerns in Wildlife Rescue and Rehabilitation

Two Occupational Safety and Health Administration (OSHA) regulations cover the majority of occupational health and safety issues encountered during wildlife rescue and rehabilitation.

The Hazardous Wastes Operations and Emergency Response (29 CFR 1910.120) regulates organizations or individuals directly involved in on-site (hot-zone) retrieval or clean-up efforts. In addition, each state may have its own worker safety requirements; coordination with the appropriate state agency should be conducted to ensure these requirements are also met.

The Hazard Communication Standard (29 CFR 1910.1200), also known as "Right to Know Law" or "HazCom" requires that all chemicals in the work place be fully evaluated for possible physical or health hazards and that all information relating to these hazards be made available to all workers. HazCom applies to rehabilitation organizations because petroleum is considered a human health hazard.

Rehabilitation organizations are legally required to educate and protect all employees. This training should also be provided to volunteers. Individuals working with oiled animals need information of all potential hazards associated with the handling of these animals. The following minimum requirements should be applied to wildlife rescue and rehabilitation personnel, including volunteers:

- Wildlife rescue and rehabilitation management personnel - this is the core

team of certified rehabilitators who will direct operations. These people must have 24 hours of classroom training in hazardous waste operations and emergency response.

- Rehabilitation facility volunteers - these volunteers work under the direction of the facility management team and are not allowed on-scene, nor in the hot-zone, unless additional training is provided (see Retrieval volunteers). Volunteers working in this category should receive four hours of training in the Hazard Communication Program before they can begin work.
- Retrieval volunteers - these volunteers work under the direction of the search and rescue management team and are allowed on-scene, but not in the hot zone. Volunteers working in this category should receive between 4-8 hours of training in the Hazard Communication Program before they can begin work.
- Any hot-zone retrieval of animals would need to be performed by someone with 40 hours of classroom safety training for hazardous waste workers that meets OSHA guidelines, including eight hour annual refresher training.

The OSC, in consultation with OSHA's representative to the Regional Response Team, has responsibility for making assessments when training requirements are in question.

(The NCP 300.210 (c) II (H) states that the annex will identify and secure the means of providing, if needed, the minimum required OSHA and EPA training for volunteers, including those who assist with injured wildlife.)

A Hazard Communication Program should contain all of the following elements:

- the nature of the oil and how its composition may change with the effect of weathering,
- the nature of other hazardous chemicals that may be contacted during rehabilitation efforts,
- routes of entry of these chemicals
- signs and symptoms of chemical exposure
- protective measures, including work practices and personal protective equipment (PPE, with training on how to properly use)
- environmental monitoring equipment
- importance of personal hygiene
- how to read a Material Safety Data Sheet and know what it means
- first aid protocols and identification of medically trained personnel and first aid stations
- storage and disposal of hazardous waste, including medical waste and PPE
- training records of written curriculum, date and hours of instruction, instructor and student names

Besides chemical hazards, other hazards such as mechanical, physical and biological hazards are also present during rescue and rehabilitation activities. Workers must also be trained on these hazards as well. In addition to the above, training elements may include the following:

Facility concerns:

- behavior of oiled birds
- proper animal restraint
- personal protective equipment and clothing to protect from bloodborne pathogens and zoonoses
- proper heavy lifting techniques
- safe working practices, e.g. no slippery or messy floors
- electrical safety

Field concerns (in addition to the above):

- climatic conditions (e.g. cold, heat)
- terrain
- proper retrieval methods
- vehicle safety (4-WD vehicle, boat)
- water hazards
- response operations hazards

Other safety concerns may occur at either the spill site or the rehabilitation facility. These concerns should be addressed on a site-specific basis.

6.4 Other Roles and Responsibilities of Natural Resource Trustees

In the event of a spill, it may be necessary for natural resource trustees and managers to initiate an assessment of damage to the environment as a result of the spill. The Natural Resource Damage Assessment (NRDA) is the process by which trustees collect, compile and evaluate data, information and statistics to determine the extent of injury to natural resources. This information is used to assess damages, the dollar amount necessary to restore injured natural resources and compensate for lost use as a result of the injury, and then to seek recovery of those damages from the responsible party.

- At the same time removal actions undertaken to contain and remove oil and wildlife rescue and rehabilitation activities are occurring, the natural resource trustees may initiate NRDA activities. These activities are usually initiated to acquire data and materials that are likely to be lost if not collected during or immediately after a spill has occurred. Such field sampling and data collection is typically limited to:
 - Samples necessary to preserve perishable materials likely to have been affected or contain evidence of the oil. These samples will generally be biological material that is either dead or has been visibly injured by the oil.

- Samples of other ephemeral conditions or materials, such as surface water, sediments, soil, or the oil itself, which are necessary for identification and measurement of concentrations. These samples would otherwise be lost because of such factors as dilution, movement, decomposition, or leaching if not taken immediately.
- Counts of dead or visibly injured organisms, which if delayed may not be possible because of factors such as decomposition, scavengers, sinking, or water movement.

In certain circumstances, a natural resource trustee may undertake emergency restoration efforts consistent with its existing authority to prevent or reduce the immediate migration of oil onto or into a trust resource. Emergency restoration would be undertaken by the trustee only if the responsible party does not do it or the EPA is precluded under statutory authority from conducting response and removal actions rapidly enough to protect natural resources.

Because initiation of natural resource damage assessment activities may occur concurrently with removal actions as part of the response, all sampling and field work conducted by the natural resource trustees must be coordinated with the lead response agency so as to minimize any interference with response operations or duplication of sampling and data collection efforts. Prior OSC approval is required for any work conducted in support of removal activities and before any associated costs will be reimbursed by the Oil Spill Liability Trust Fund. Other activities performed as part of initiation of damage assessments are reimbursable by the Oil Spill Liability Trust Fund as long as these activities are approved in advance by the Fund Center.

7.0 EVALUATING THE INTERFACE OF THE ACP WITH NON-FEDERAL PLANS

The final rule on Oil Pollution Prevention for Non-Transportation-Related Onshore Facilities, 40 CFR Part 112, requires facilities with a total oil storage capacity greater than or equal to one million gallons to submit response plans if located at a distance such that a discharge of oil could cause injury (as defined at 40 CFR 112.2) to fish, wildlife, sensitive environments and public water intakes.

Facility owners or operators must determine the distance at which an oil spill could cause injury to fish and wildlife and sensitive environments and have a plan for mitigating a discharge's adverse effect. The plan must be consistent with the requirements of the NCP and this ACP Annex.

EPA will review and approve Facility Response Plans for compatibility with this Annex; pipeline plans in Region VII will be reviewed and approved by RSPA. Participation by facilities in the Area and Subarea Committees is encouraged. Joint exercises will be conducted to test facility plans and their interface with this Annex.

ATTACHMENT 1

**WILDLIFE DAMAGE MANAGEMENT
EQUIPMENT SUPPLIERS**

December, 1994

Attachment 1

**WILDLIFE DAMAGE MANAGEMENT
EQUIPMENT SUPPLIERS**

Repellents

*Electronic Alarm and Recorded Bird
Repellents*

Evert Achterberg
P.O. Box 123
Escalon, CA 95320
(Double John Purivox Bird Scarer)

Adams Dominion, Inc.
1212 Weible Road
Crestwood, KY 40014
(502) 241-0241
(Animal Detection)

Air Birdstrike Prevention
15 Edgewood St.
Worcester, MA 01602
(301) 963-9270
(Radio-controlled planes)

Arkansas Electronic Consultants
800 Stanton Road
Little Rock, AR 72209

Av-Alarm Corp.
675-D Conger St.
Eugene, OR 97402
(503) 342-1271

Coleman Equipment, Inc.
342 Madison Ave.
New York, NY 10017
(212) 687-2154
(vigil-andy)

Electronic Game Calls
210 W. Grand Ave.
Wisconsin Rapids, WI 54495

Falcon Safety Products Inc.
1065 Bristol Road
Mountainside, NJ 07092
(201) 233-5000
(air horn)

Jennings Industries, Inc.
2730 Chanticleer Ave.
San Cruz, CA 95060
(408) 475-8311

Margo Horticultural Supplies Ltd.
RR 6 Site 8, Box 2
Calgary, Alberta T2M 4L5
Canada
(403) 285-9731
(microwave motion detector)

Phoenix Agritech
P.O. Box 10
Nova Scotia, B2N5B6
902-897-2728
(Phoenix Wailer - Acoustical bird
deterrent device)

Reed-Joseph International Co.
P.O. Box 894
Greenville, MS 38702
(800) 647-5554
(animal detection)

Signal Broadcasting Co.
2314 Broadway St.
Denver, CO 80205
(303) 295-0479
(distress call tapes)

Source: USDA

**WILDLIFE DAMAGE MANAGEMENT
EQUIPMENT SUPPLIERS**

Tomko Enterprises Inc.
Rt. 58, RD #2
P.O. Box 937-A
Riverhead, NY 11901
(516) 727-3932
("clapper" device with timer)

Wrightman Electronics, Inc.
P.O. Box 989
Easton, MD 21601

Propane Exploders

Alexander-Tagg Inc.
395 Jacksonville Rd.
Warminster, PA 18974
(215) 675-7200

Coleman Equipment Inc.
342 Madison Ave.
New York, NY 10017
(212) 687-2154
(vigil andy)

M. J. Flynn Inc.
Syracuse, NY
(315) 437-6536
(Zon gun)

C. Frensch Ltd.
168 Main St. E.
Box 67
Grimsby, Ontario L3M 1G4
Canada
(416) 945-3817

Pete Konzak
Box 20
Minnewaukan, ND 58351
(701) 473-5646
(jump-up scarecrow)

B.M. Lawrence & Co.
233 Sansome St.
San Francisco, CA 94104
(415) 981-3650
(Zon gun)

McKinzie Scientific
P.O. Box 1077
1340 Kerr Ave.
Lancaster, OH 43130
(614) 687-4617

Pisces Ind.
P.O. Box 6407
Modesto, CA 95355
(209) 578-5502

Reed-Joseph International Co.
P.O. Box 894
Greenville, MS 38702
(800) 647-5554

Smith-Roles
1367 S. Anna St.
Wichita, KS 67209
(316) 945-0295

Spring Ledge Farms
RD 3
Dundee, NY 14837

Teiso Kasei Co. Ltd.
350 S. Figueroa St., Suite 350
Los Angeles, CA 90071
(213) 680-4349

USDA, APHIS, S&T, DWRC
P.O. Box 25266, Building 16
Denver Federal Center
Denver, CO 80225-0266
(303) 236-7877
(farmer fred)

**WILDLIFE DAMAGE MANAGEMENT
EQUIPMENT SUPPLIERS**

Pyrotechnic Devices

The Bullseye Gunshop
1081 Huntingdon Ave.
Waterbury, CT 06704
(203) 755-1055

California Seal Control Corp.
P.O. Box 949
San Pedro, CA 90733
(310) 833-2681
(underwater explosives)

Colonial Fireworks
5956 Ivanhoe
Ipsilanti, MI 48197
(313) 482-3272

New Jersey Fireworks Co.
Box 118
Vineland, NJ 08360
(609) 692-8030
(rope firecrackers)

O.C. Ag. Supply
1328 Allec St.
Anaheim, CA 92805
(714) 991-0960

Reed-Joseph International Co.
P.O. Box 894
Greenville, MS 38702
(800) 647-5554

Stoneco Inc.
P.O. Box 187
Dacono, CO 80514
(303) 833-2376

Sutton Ag. Ent.
1081 Harkins Rd.
Salinas, CA 93901
(408) 422-9693

Wald & Co.
208 Broadway
Kansas City, MO 64105
(816) 842-9299
(rope firecrackers)

Western Fireworks Co.
2542 SE 13th Ave.
Canby, OR 97103
(503) 266-7770

**WILDLIFE DAMAGE MANAGEMENT
EQUIPMENT SUPPLIERS**

Visual Bird Repellents

Atmospheric Instrumentation Research
(AIR) Inc.
1880 S. Flatiron Ct., Suite A
Boulder, CO 80301
(301) 433-7187
(balloons, kites)

Bird-X
325 W. Huron St.
Chicago, IL 60610
(312) 642-6871
(Raptor effigies, lights)

Coleman Equipment, Inc.
342 Madison Ave.
New York, NY 10017
(212) 687-2154
(vigil-andy)

R.E. Deitz Co.
225 Wilkinson St.
Syracuse, NY 13201
(315) 424-7400
(strobe lights)

Edmund Scientific Company
7977 EDSCORP Building
Barrington, NJ 08007
(609) 547-3488
(3' balloons)

The Huge Co.
7625 Page Blvd.
St. Louis, MO 63133
(800) 325-3371
(Raptor effigies, lights)

Kite City
1201 Front St.
Old Sacramento, CA 95814
(Hawk Kite)

Pete Konzak
Box 20
Minnewaukan, ND 58351
(701) 473-5646
(jump-up scarecrow)

Mellingers
2310 W. South Range Rd.
N. Lima, OH 44452
(800) 321-7444
(scarecrow)

Nishizawa (USA) Ltd.
112 W. 9th St., Suite 903
Los Angeles, CA 90015
(213) 627-7491
(Mylar balloons, flash tape)

Offshore Sourcing Development
1240 Josephine Road
Roseville, MN 55113
(612) 633-2384
(balloons)

Orchard Equipment & Supply Co.
P.O. Box 540
Conway, MA 01341
(413) 369-4335
(balloons)

Pest Management Supply, Inc.
P.O. Box 938
Amherst, MA 01004
(413) 253-3747
(balloons, flash tape)

Raven Ind. Inc.
P.O. Box 1007
Sioux Falls, SD 57117
(605) 336-2750
(balloons)

APPENDIX A.2

ENVIRONMENTALLY SENSITIVE AREAS

Revision 1
December, 1994

Appendix A.2 contains a listing of Environmentally Sensitive Areas (ESAs) in Region VII. The list has been accumulated by requesting information from Federal, state and local agencies regarding their areas of responsibility as recommended by Appendix D included in Attachment D-1, within the Oil Pollution Prevention; Non-Transportation-Related Onshore Facilities; Final Rule, 40CFR Part 112. (See Table A)

Table A: Recommended ESAs and Current Status in Region VII ACP.

ENVIRONMENTALLY SENSITIVE AREAS	RESPONSIBLE FEDERAL AGENCY	STATUS IN REGION VII ACP
Wetlands, as defined in 40 CFR 230.3	EPA	Available. See #1
Critical habitat for designated or proposed endangered/threatened species	NOAA/FWS	See #2
Habitat used by designated or proposed endangered/ threatened species or marine mammals defined as depleted	NOAA/FWS	Under development
Marine sanctuaries	NOAA	NA
National parks	DOI/NPS	Listed
Federal wilderness areas	USDA	listed
Coast Zone Management Act designated areas	NOAA	NA
National estuaries	NOAA	listed
Near coastal waters program areas	EPA	NA

Revision 1
December, 1994

ENVIRONMENTALLY SENSITIVE AREAS	RESPONSIBLE FEDERAL AGENCY	STATUS IN REGION VII ACP
Clean lakes program critical areas	EPA	Under development
National monuments	DOI/NPS	Listed
National seashore recreational areas	DOI/NPS	NA
National lakeshore recreational areas	DOI/NPS	Listed
National preserves	DOI/NPS	Listed
National wildlife refuges	NOAA/FWS	Listed
Coastal barrier resource system (units, undeveloped, partially developed)	DOI/FWS	NA
National river reach designated as recreational	EPA	Listed
Federal or state designated scenic or wild river	DOI/NPS	Listed
National conservation areas	DOI/BLM	Listed
Hatcheries	DOI/FWS	Listed
Waterfowl management areas	DOI/FWS	Listed

NA = These ESAs are not applicable in Region VII

Listed = These ESAs are currently listed in Appendix A.1

See #' = These ESAs are referenced and are available through EPA
Region VII, EP&R, 25 Funston Rd. Kansas City, KS 66115
(913) 550-5000

Acronyms

BLM - Bureau of Land Management
DOI - Department of Interior
EPA - Environmental Protection Agency
FWS - Fish and Wildlife Services
NOAA - National Oceanic and Atmospheric Administration
NPS - National Park Service
USDA - United State Department of Agriculture

Revision 1
December, 1994

Environmentally Sensitive Areas

The following list identifies ESAs in the four state EPA Region VII by state, county, agency, type and name. The database is a growing bank of information to be utilized with the understanding that it is limited in its data. Updates will be made periodically to acknowledge new ESAs or to add those that may have been missed.



ENVIRONMENTALLY SENSITIVE AREAS

REGION VII

IA	TNC	Project Areas	Ames High Prairie	
IA	TNC	Project Areas	Cedar Hills Sand Prairie	
IA	TNC	Project Areas	Behrens Pond & Woodland	
IA Plymouth	TNC	Project Areas	Broken Kettle Grasslands	Loess Hills
IA	TNC	Project Areas	Sioux City Prairie	
IA Bremer	TNC	Project Areas	Brayton-Horsley Prairie	
IA	TNC	Project Areas	Mountain Maple Hollow	NE Iowa
IA Plymouth	TNC	Project Areas	Five Ridge Preserve	
IA	TNC	Project Areas	Howard Creek	
IA Dallas	TNC	Project Areas	Dilvers-Smith Woods	access to Raccoon River
IA	TNC	Project Areas	Red Cedar Woodland	
IA	TNC	Project Areas	Freda Haffner Reserve	
IA	TNC	Project Areas	Kaufmann Avenue Prairie	Dubuque
IA Chickasaw	TNC	Project Areas	Schroeder Prairie & Fen	
IA	TNC	Project Areas	Savage Memorial Woods	
IA	TNC	Project Areas	Greiner Family Nature Preserve	N. of Muscatine
IA	TNC	Project Areas	Bluebell Hollow	
IA	TNC	Project Areas	Roggman Boreal Slopes	
IA	TNC	Project Areas	Lock & Dam #14 Eagle Area	
IA	TNC	Project Areas	Retz Memorial Forest	
IA VanBuren	TNC	Project Areas	Reno Timber	
IA	TNC	Project Areas	Hoffman Prairie	
IA	TNC	Project Areas	Steele Prairie	
IA Dickinson	TNC	Project Areas	Halbur Fen	
IA	USFS	Research Areas	None	
IA	IDNR	State Parks	Beeds Lake	3 Mi. N.W. Hampton-Co.Rd.
IA	IDNR	State Parks	Okamanpedan	3 Mi. N.E. Dolliver-Co.Rd.
IA	IDNR	State Parks	Templar Park Rec. Area	3 Mi. N.W. Spirit Lake-IA 276
IA	IDNR	State Parks	Cedar Rock	3 Mi. N.W. Quasqueton
IA	IDNR	State Parks	Rice Lake	2.5 Mi. S.E. Lake Mills-Co.Rd.
IA	IDNR	State Parks	Badger Creek Rec. Area	1/6 Mi. S.E. Van Meter
IA	IDNR	State Parks	Pilot Knob	4 Mi. E. Forest City-IA 9
IA	IDNR	State Parks	Clear Lake	2 Mi. S. Clear Lake-IA. 106
IA	IDNR	State Parks	Yellow River Forest Camping	14 Mi. S.E. Waudon-IA 76
IA	IDNR	State Parks	Springbrook	8 Mi. N.E. Guthrie Center-IA.25-384
IA	IDNR	State Parks	Fairport	5 Mi. E. Muscatine-IA.22
IA	IDNR	State Parks	Pikes Peak	2.5 Mi. S.W. Spirit Lake-IA 9
IA	IDNR	State Parks	Dolliver Memorial	3 Mi N.W. Lehigh-IA. 50
IA	IDNR	State Parks	Big Creek	2 Mi. N. Polk City-IA. 415
IA	IDNR	State Parks	Lake Ahquabi	5.5 Mi. S.W. Indianola-IA. 349
IA	IDNR	State Parks	Elk Rock (Red Rock)	7 Mi. N. Knoxville-IA.14
IA	IDNR	State Parks	Emerson Bay	2.5 Mi N. Milford-IA.32
IA	IDNR	State Parks	Geode	4 Mi. S.W. Danville-CO.Rd.
IA	IDNR	State Parks	Lake MacBride	4 Mi. W. Solon-IA. 382
IA	IDNR	State Parks	Lacey-Keosauqua	Adjoins Keosauqua-IA.1
IA	IDNR	State Parks	Fort Atkinson	Adjoins F. Atkinson-IA.24
IA	IDNR	State Parks	Lake Anita	5 Mi. S. Anita Interchange-I-80
IA	IDNR	State Parks	Ledges	6 Mi. S. Boone-IA. 164
IA	IDNR	State Parks	Lake Keomah	5 Mi. E. Oskaloosa-IA. 371
IA	IDNR	State Parks	Fort Defiance	1 Mi W. Esterville-IA. 9
IA	IDNR	State Parks	Lake Manawa	1 Mi. S. IA. 92-Council Bluffs
IA	IDNR	State Parks	Pleasant Creek	4 Mi. N. .5 Mi. W. Palo
IA	IDNR	State Parks	Lake Wapello	6 Mi. W. Drakesville-IA.273
IA	IDNR	State Parks	Geo. Wyth Memorial	Adjoining Cedar Falls-US 57
IA	IDNR	State Parks	Lewis & Clark	3 Mi N.W. Osawa-IA. 324
IA	IDNR	State Parks	Twin lakes	7.5 Mi. N. Rockwell City-IA 4-124

ENVIRONMENTALLY SENSITIVE AREAS

REGION VII ACI

ST	County	Agency	Type	Name	Address
IA		NPS	Biosphere Reserve	None	
IA		BIA	Federal Indian Reservation	Sac & Fox	
IA		COE	Large Reservoirs	Saylorville Lake	
IA		COE	Large Reservoirs	Lake Red Rock	
IA		COE	Large Reservoirs	Rathbun Lake	
IA		COE	Large Reservoirs	Coralville Lake	
IA		FWS	National Fish Hatchery	Pairport NFH	
IA		NPS	National Parks	Effigy Mounds Nat. Monument	3 Mi. N. of Marquette
IA		NPS	National Parks	Herbert Hoover Historic Site	8 Mi. E. Iowa City
IA		FWS	National Wildlife Refuge	Union Slough NWR	
IA		FWS	National Wildlife Refuge	Walnut Creek NWR	
IA		FWS	National Wildlife Refuge	Osceola County WPA	
IA		FWS	National Wildlife Refuge	Driftless Area NWR	
IA		FWS	National Wildlife Refuge	Upper Mississippi Refuge	
IA		FWS	National Wildlife Refuge	De Soto NWR	
IA	Dickinson	NPS	Natural Landmarks	Cayler Prairie	5 Mi. W. of West Okoboji
IA	Clay	NPS	Natural Landmarks	Dewey Pasture & Smith's Slough	4 Mi. N.W. of Ruthven
IA	Hamilton	NPS	Natural Landmarks	Anderson Goose Lake	1 Mi. E. of Jewell
IA	Howard	NPS	Natural Landmarks	Hayden Prairie	12 Mi. N.W. of Cresco
IA	Palo Alto	NPS	Natural Landmarks	Dewey Pasture & Smith's Slough	4 Mi. N.W. of Ruthven
IA	Harrison	NPS	Natural Landmarks	Loess Hills	Turin & Little Sioux/Smith Lake
IA	Winnebago	NPS	Natural Landmarks	Cold Water Cave	
IA	Dubuque	NPS	Natural Landmarks	White Pine Hollow Preserve	20 Mi. N.W. of Dubuque
IA	Monona	NPS	Natural Landmarks	Loess Hills	Turin & Little Sioux/Smith Lake
IA		DOI	Nat. Migratory Bird Refuges	De Soto	
IA		DOI	Nat. Migratory Bird Refuges	Union Slough	
IA		DOI	Nat. Migratory Bird Refuges	Mark Twain	
IA	Clayton	NPS	Nat. Scenic Rivers	Turkey River	Mississippi River to Vernon Springs
IA	Winnebago	NPS	Nat. Scenic Rivers	Turkey River	Mississippi River to Vernon Springs
IA	Louisa	NPS	Nat. Scenic Rivers	Cedar River	Iowa River to Highway 6
IA	Cedar	NPS	Nat. Scenic Rivers	Wapsipinicon River	Mississippi River to Hwy. 334 at Frederika
IA	Howard	NPS	Nat. Scenic Rivers	Turkey River	Mississippi River to Vernon Springs
IA	Scott	NPS	Nat. Scenic Rivers	Wapsipinicon River	Mississippi River to Hwy. 334 at Frederika
IA	Buchanan	NPS	Nat. Scenic Rivers	Wapsipinicon River	Mississippi River to Hwy. 334 at Frederika
IA	Linn	NPS	Nat. Scenic Rivers	Wapsipinicon River	Mississippi River to Hwy. 334 at Frederika
IA	Fayette	NPS	Nat. Scenic Rivers	Turkey River	Mississippi River to Vernon Springs
IA	Jackson	NPS	Nat. Scenic Rivers	Maquoketa River	Mississippi River to US 151
IA	Allamakee	NPS	Nat. Scenic Rivers	Yellow River	Mississippi River to Hwy. W60 near Hyron
IA	Jones	NPS	Nat. Scenic Rivers	Wapsipinicon River	Mississippi River to Hwy. 334 at Frederika
IA	Jones	NPS	Nat. Scenic Rivers	Maquoketa River	Mississippi River to US 151
IA	Clinton	NPS	Nat. Scenic Rivers	Wapsipinicon River	Mississippi River to Hwy. 334 at Frederika
IA	Black Hawk	NPS	Nat. Scenic Rivers	Wapsipinicon River	Mississippi River to Hwy. 334 at Frederika
IA	Muscatine	NPS	Nat. Scenic Rivers	Cedar River	Iowa River to Highway 6
IA	Bremer	NPS	Nat. Scenic Rivers	Wapsipinicon River	Mississippi River to Hwy. 334 at Frederika
IA		TNC	Project Areas	Hanging Bog	
IA	Butler	TNC	Project Areas	Big marsh	near Allison
IA	Dickinson	TNC	Project Areas	Silver Lake Fen	
IA		TNC	Project Areas	Finch Memorial Forest	Upper Iowa River
IA		TNC	Project Areas	Berry Woods	
IA		TNC	Project Areas	Fern Ridge	
IA	Clay	TNC	Project Areas	Lindstrom-Simons Fen	
IA		TNC	Project Areas	The Diggings	
IA		TNC	Project Areas	Williams Prairie	
IA		TNC	Project Areas	Crossman Prairie	

ENVIRONMENTALLY SENSITIVE AREAS

REGION VII AC

IA	IDNR	State Parks	Palisades-Kepler	3.5 Mi. W. Mt. Vernon-US 30
IA	IDNR	State Parks	Gull Point	3.5 Mi. N. Milford-IA. 32
IA	IDNR	State Parks	Plum Grove	1030 Carroll St., Iowa City
IA	IDNR	State Parks	Pillsbury Point	Arnolds Park-US 71
IA	IDNR	State Parks	Wanata	.5 Mi. S. Peterson-IA 10
IA	IDNR	State Parks	Isthmus Access	N. Shore E. Okoboji Lake
IA	IDNR	State Parks	Trappers Bay	Adjoins Lake Park-IA 219
IA	IDNR	State Parks	Honey Creek	9.5 Mi. W./3.5S.E. Moravia Hwy. 142
IA	IDNR	State Parks	Pine Lake	.5 Mi. N.E. Eldora-IA 118
IA	IDNR	State Parks	Preparation Canyon	5 Mi S.W. Moorhead-IA. 372
IA	IDNR	State Parks	Union Grove	4 Mi. S.W. Gladbrook-Co.Rd.
IA	IDNR	State Parks	Rock Creek	6 Mi. N.E. Kellogg-Co.Rd.
IA	IDNR	State Parks	Viking Lake	4 Mi. S.E. Stanton-Co. Rd.
IA	IDNR	State Parks	Volga River Rec Area	4 Mi. N. Fayette-IA 150
IA	IDNR	State Parks	Wapsipinicon	Adjoins Anamosa-E 34
IA	IDNR	State Parks	Lower Gar Access	.5 Mi. S.E. Arnolds Park-US 71
IA	IDNR	State Parks	Wildcat Den	10 Mi. E. Muscatine-IA.22
IA	IDNR	State Parks	Lake of Three Fires	3 Mi. N.E. Bedford-IA.49
IA	IDNR	State Parks	Ambrose A. Call	1.5 Mi. w.W. Algona
IA	IDNR	State Parks	McIntosh Woods	.75 Mi. E.Ventura-US 18
IA	IDNR	State Parks	Triboji Beach	N.W. Shore W. Okoboji Lake
IA	IDNR	State Parks	Prairie Rose	6 Mi. E.S. Harlan
IA	IDNR	State Parks	Bixby	2 Mi. N. Edgewood
IA	IDNR	State Parks	Maquoketa Caves	7 Mi. N.w. Maquoketa-IA. 428
IA	IDNR	State Parks	Brush Creek Canyon	2 Mi. N. Arlington
IA	IDNR	State Parks	Bobwhite	1 Mi. W. Allerton-IA.40
IA	IDNR	State Parks	Stephens Forest Camping	W. Lucas, E. Chariton-US 65-34
IA	IDNR	State Parks	Marble Beach	2 Mi. N. W. Orleans-IA. 276
IA	IDNR	State Parks	Walnut Woods	4 Mi. S.W. Des Moines-IA.5
IA	IDNR	State Parks	Nine Eagles	6 Mi. S.E. Davis City-CO. Rd.
IA	IDNR	State Parks	Wilson Island Rec. Area	5 Mi. W. Loveland-IA 362
IA	IDNR	State Parks	Lake Darling	3 Mi. W. Brighton-IA. 78 & 1
IA	IDNR	State Parks	Bellevue	2.5 Mi. S. Bellevue-US 52
IA	IDNR	State Parks	Stone	8 Mi. N.W. Sioux City-IA 12
IA	IDNR	State Parks	Brushy Creek Rec. Area	4 Mi. E. Lehigh-Co.Rd.
IA	IDNR	State Parks	Mines Of Spain	S. Edge of Dubuque, from US 52
IA	IDNR	State Parks	Waubesaie	7 Mi. S.W. Sidney-IA 239-2
IA	IDNR	State Parks	Red Haw	1 Mi. E. Chariton-U.S. 34
IA	IDNR	State Parks	Black Hawk	Lake View-IA. 175 & 71
IA	IDNR	State Parks	Backbone	4 Mi. s.W. Strawberry Point IA. 410
IA	IDNR	State Parks	Shinek Forest Camping	1 Mi. E. Farmington-IA.2
IA	IDNR	State Parks	Mini-Wakan	N. Shore Spirit Lake
IA	NAS	Wildlife Sanctuaries	None	
KS	NPS	Biosphere Reserve	Konza Prairie	Konza Prairie Research Natural Area
KS	BIA	Federal Indian Reservation	Sac & Fox	
KS	BIA	Federal Indian Reservation	Kickapoo	
KS	BIA	Federal Indian Reservation	Potawatomi	
KS	BIA	Federal Indian Reservation	Iowa	
KS	COE	Large Reservoirs	Milford lake	
KS	COE	Large Reservoirs	Marion lake	
KS	COE	Large Reservoirs	Tuttle Creek Lake	
KS	COE	Large Reservoirs	John Redmond Res.	
KS	COE	Large Reservoirs	Perry lake	
KS	COE	Large Reservoirs	El Dorado Lake	
KS	COE	Large Reservoirs	Clinton Lake	
KS	COE	Large Reservoirs	Wilson Lake	

ENVIRONMENTALLY SENSITIVE AREAS

REGION VII AC

KS	FWS	National Fish Hatchery	Cedar Bluff NFH	
KS	NPS	National Parks	Fort Larned Nat. Historic Site	6 Mi. W. Larned, Hwy. 156
KS	NPS	National Parks	Fort Scott Nat. Historic Site	Adjacent to Fort Scott bus. district
KS		National Wilderness Areas	None	
KS	FWS	National Wildlife Refuge	Kirwin	N. Fork of Solomon River Valley
KS	FWS	National Wildlife Refuge	Quivira NWR	
KS	FWS	National Wildlife Refuge	Flint Hills NWR	
KS	FWS	National Wildlife Refuge	Marais Des Cygnes	
KS	FWS	National Wildlife Refuge	Quivira	south-central Kansas
KS	FWS	National Wildlife Refuge	Kirwin NWR	
KS	FWS	National Wildlife Refuge	Flint Hills	Neesho River Valley
KS	FWS	National Wildlife Refuge	Marais Des Cygnes NWR	
KS Douglas	NPS	Natural Landmarks	Baldwin Woods	11 Mi. S. of Lawrence
KS Ottawa	NPS	Natural Landmarks	Rock City	2.5 Mi. S.W. of Minneapolis
KS Douglas	NPS	Natural Landmarks	Baker University Wetlands	3 Mi. S. of Lawrence
KS Gove	NPS	Natural Landmarks	Monument Rocks Natural Area	23 Mi. S. of Oakley
KS Clark	NPS	Natural Landmarks	Big Basin Preserve	13 Mi. W.W.W. of Ashland
KS	DOI	Nat. Migratory Bird Refuges	Flint Hills	
KS	DOI	Nat. Migratory Bird Refuges	Quivira	
KS	DOI	Nat. Migratory Bird Refuges	Kirwin	
KS Leavenworth	NPS	Nat. Scenic Rivers	Kansas River	I-635 to Delaware River
KS Wilson	NPS	Nat. Scenic Rivers	Fall River	Verdigris River to Fall River Lake
KS Haskell	NPS	Nat. Scenic Rivers	Cimarron River	Hwy 23 E. of Liberal, KS to CO/KS line
KS Cowley	NPS	Nat. Scenic Rivers	Grouse Creek	Arkansas River to Cowley/County line
KS Chautauqua	NPS	Nat. Scenic Rivers	Caney River	KS/OK line to source
KS Wyandotte	NPS	Nat. Scenic Rivers	Kansas River	I-635 to Delaware River
KS Greenwood	NPS	Nat. Scenic Rivers	Otter Creek and N. Branch	Fall River Reservoir to Hwy 96/WW of Blodgett
KS Russell	NPS	Nat. Scenic Rivers	Saline River	Wilson Lake to Fairport
KS Meade	NPS	Nat. Scenic Rivers	Cimarron River	KS/OK line/Comanche County-Hwy 23,E of Liberal
KS Barber	NPS	Nat. Scenic Rivers	Medicine (Lodge) River	Gerlane to belvidere
KS Meade	NPS	Nat. Scenic Rivers	Cimarron River	Hwy 23 E. of Liberal, KS to CO/KS line
KS Clark	NPS	Nat. Scenic Rivers	Cimarron River	KS/OK line/Comanche County-Hwy 23,E of Liberal
KS Sumner	NPS	Nat. Scenic Rivers	Chikaskia River	KS/OK line to Hwy 2, N.E. of Runnymede
KS Stevens	NPS	Nat. Scenic Rivers	Cimarron River	Hwy 23 E. of Liberal, KS to CO/KS line
KS Seward	NPS	Nat. Scenic Rivers	Cimarron River	Hwy 23 E. of Liberal, KS to CO/KS line
KS Cherokee	NPS	Nat. Scenic Rivers	Shoal Creek	Spring River to source
KS Elk	NPS	Nat. Scenic Rivers	Fall River	Verdigris River to Fall River Lake
KS Cherokee	NPS	Nat. Scenic Rivers	Spring river	Hwy. 96 to Hwy. 44
KS Chase	NPS	Nat. Scenic Rivers	South Fork Cottonwood River	Cottonwood River to Little Cedar Creek
KS Grant	NPS	Nat. Scenic Rivers	Cimarron River	Hwy 23 E. of Liberal, KS to CO/KS line
KS Comanche	NPS	Nat. Scenic Rivers	Cimarron River	KS/OK line/Comanche County-Hwy 23,E of Liberal
KS Greenwood	NPS	Nat. Scenic Rivers	Fall River	Verdigris River to Fall River Lake
KS Kiowa	NPS	Nat. Scenic Rivers	Medicine (Lodge) River	Gerlane to belvidere
KS Geary	NPS	Nat. Scenic Rivers	Lyon Creek	Smoky Hill River to RR Bridge S. of Woodbine
KS Douglas	NPS	Nat. Scenic Rivers	Kansas River	I-635 to Delaware River
KS Barber	NPS	Nat. Scenic Rivers	Medicing (Lodge) River	KS/OK line to Gerlane
KS Morton	NPS	Nat. Scenic Rivers	Cimarron River	Hwy 23 E. of Liberal, KS to CO/KS line
KS Cheyenne	NPS	Nat. Scenic Rivers	Arikaree River	KS/WB line to Alder Creek
KS Wabaunsee	NPS	Nat. Scenic Rivers	Will Creek & W. & E. Branches	Kansas River to source of E. & W. Branches
KS Harper	NPS	Nat. Scenic Rivers	Chikaskia River	KS/OK line to Hwy 2, N.E. of Runnymede
KS Jefferson	NPS	Nat. Scenic Rivers	Kansas River	I-635 to Delaware River
KS Chase	NPS	Nat. Scenic Rivers	Cedar Creek	Cottonwood River to Chase/County line
KS Dickinson	NPS	Nat. Scenic Rivers	Lyon Creek	Smoky Hill River to RR Bridge S. of Woodbine
KS Johnson	NPS	Nat. Scenic Rivers	Kansas River	I-635 to Delaware River
KS Barton	TNC	Project Areas	Cheyenne Bottom Wildlife Area	near Great Bend, KS
KS	TNC	Project Areas	Kouza prairie	S. of Manhattan, KS

ENVIRONMENTALLY SENSITIVE AREAS

REGION VII A

KS	USFS	Research Areas	None	
KS	KOWP	State Parks	El Dorado	RR 3, Box 29A, El Dorado, 67042
KS	KOWP	State Parks	Scott	RR 1, Box 50, Scott City, 67871
KS	KOWP	State Parks	Fall River	RR 1, Box 44, Toronto, 66777
KS	KOWP	State Parks	Prairie Dog	Box 431, Norton, 67654
KS	KOWP	State Parks	Lovewell	RR 1, Box 66A, Webber, 66870
KS	KOWP	State Parks	Perry	RR 1, Box 464A, Ozawie, 66870
KS	KOWP	State Parks	Elk City	Box 845, Independence, 67301
KS	KOWP	State Parks	Cheney	RR 1, Box 167A, Cheney, 67025
KS	KOWP	State Parks	Wilson	RR 1, Box 181, Sylvan Grove, 67481
KS	KOWP	State Parks	Tuttle Creek	5020-B, Tuttle Cr. Blvd., Manhattan, 66502
KS	KOWP	State Parks	Clinton	798 N. 1415 Rd, Lawrence, 66049
KS	KOWP	State Parks	Pomona	RR1, Box 118, Vassar, 66543
KS	KOWP	State Parks	Cedar Bluff	P.O. 76A, Ellis, 67637
KS	KOWP	State Parks	Hillsdale	26001 W. 255th St. Paola, 66871
KS	KOWP	State Parks	Glen Elder	Box 162A, Glen Elder, 67446
KS	KOWP	State Parks	Crawford	Farlington, 66734
KS	KOWP	State Parks	Meade	Box K, Meade, 67864
KS	KOWP	State Parks	Toronto	RR 1, Box 44, Toronto, 66777
KS	KOWP	State Parks	Eisenhower	RR2, Box 306, Osage City, 66523
KS	KOWP	State Parks	Sand Hills	4207 E. 56th, Rte 5, Hutchinson, 67502
KS	KOWP	State Parks	Mushroom Rock	RR1, Box 26D, Marquette, 67464
KS	KOWP	State Parks	Wilford	8811 State Park, Wilford, 66514
KS	KOWP	State Parks	Kanopolis	RR 1, Box 26D, Marquette, 67464
KS	KOWP	State Parks	Webster	RR 2, Box 153, Stockton, 67869
KS	NAS	Wildlife Sanctuaries	None	
MO	NPS	Biosphere Reserve	None	
MO	COE	Large Reservoirs	Mark Twain Lake	
MO	COE	Large Reservoirs	Stockton Lake	
MO	COE	Large Reservoirs	Smithville Lake	
MO	COE	Large Reservoirs	Table Rock Lake	
MO	COE	Large Reservoirs	Harry S. Truman Res.	
MO	COE	Large Reservoirs	Pomme De Terre Lake	
MO	COE	Large Reservoirs	Wappapello Lake	
MO	FWS	National Fish Hatchery	Neosho NFH	
MO	FWS	National Fish Hatchery	Columbia Nat. Fisheries Lab	
MO	FWS	National Fish Hatchery	Neosho NFH	Neosho
MO	USDA/FS	National Forests	Mark Twain Nat. Forest	
MO	NPS	National Parks	Wilson's Creek Nat. Battlefield 10 Mi. S.W. of Springfield	
MO	NPS	National Parks	Jefferson Nat. Expansion MemorialMississippi Riverfront/St. Louis	
MO	NPS	National Parks	Harry Truman Nat. Historic Site Truman Rd. & Main St./Independence	
MO	NPS	National Parks	George Washington Nat. Monument 7 Mi. S. of I.44	
MO	NPS	National Parks	Ulysses S. Grant Historic Site 9060 White Haven Dr./St. Louis	
MO	NPS	National Parks	Ozark National Scenic Riverways 134 Mi. of Jacks Fork & Current Rivers	
MO	NPS	National Scenic River	Ozark NSR	
MO	USFS	National Wilderness Areas	Piney Creek	Mark Twain NF
MO	FWS	National Wilderness Areas	Mingo	Mingo NWR
MO	USFS	National Wilderness Areas	Bell Mountain	Mark Twain NF
MO	USFS	National Wilderness Areas	Hercules Glades	Mark Twain NF
MO	USFS	National Wilderness Areas	Irish	Mark Twain NF
MO	USFS	National Wilderness Areas	Paddy Creek	Mark Twain NF
MO	USFS	National Wilderness Areas	Devil's Backbone	Mark Twain NF
MO	USFS	National Wilderness Areas	Rockpile Mountain	Mark Twain NF
MO	FWS	National Wildlife Refuge	Swan Lake NWR	
MO	FWS	National Wildlife Refuge	Clarence Cannon NWR	
MO	FWS	National Wildlife Refuge	Ozark Cavefish NWR	

ENVIRONMENTALLY SENSITIVE AREAS

REGION VI

MO	FWS	National Wildlife Refuge	Mingo NWR	
MO	FWS	National Wildlife Refuge	Pilot Knob NWR	
MO	FWS	National Wildlife Refuge	Squaw Creek NWR	
MO	FWS	National Wildlife Refuges	Clarence Cannon	near Annada
MO		National Wildlife Refuges	Swan Lake	near Sumner, MO
MO	FWS	National Wildlife Refuges	Mingo	near Puxico
MO	FWS	National Wildlife Refuges	Squaw Creek	near Mound, MO
MO Crawford	NPS	Natural Landmarks	Onondaga Cave	5 Mi. S.W. of Leasburg
MO Clay	NPS	Natural Landmarks	Maple Woods Natural Area	
MO Barton	NPS	Natural Landmarks	Golden Prairie	16 Mi N.E. of Carthage
MO St. Clair	NPS	Natural Landmarks	Taberville Prairie	2.5 Mi. N. of Taberville
MO Mississippi	NPS	Natural Landmarks	Big Oak Tree	Big Oak Tree State Park
MO Callaway	NPS	Natural Landmarks	Tucker Prairie	7 Mi. N.M.W. of Fulton
MO Phelps	NPS	Natural Landmarks	Maramec Spring	8 Mi. S.E. of St. James
MO Warren	NPS	Natural Landmarks	Wegener Woods	.25 Mi. N. of Holstein
MO Marion	NPS	Natural Landmarks	Mark Twain & Cameron Caves	2 Mi. S.E. of Hannibal
MO Oregon	NPS	Natural Landmarks	Grand Gulf	8 Mi. W. of Thayer
MO Stone	NPS	Natural Landmarks	Marvel Cave	50 Mi. S. of Springfield
MO Camben	NPS	Natural Landmarks	Carroll Cave	Private
MO Oregon	NPS	Natural Landmarks	Greer Spring	52 Mi. W. of Poplar Bluff
MO Taney	NPS	Natural Landmarks	Tumbling Creek Cave	
MO Ripley	NPS	Natural Landmarks	Cupola Pond	Mark Twain Nat. Forest
-MO Ste. Genevieve	NPS	Natural Landmarks	Pickle Springs	7 Mi. E. of Farmington
MO	DOI	Nat. Migratory Bird Refuges	Swan Lake	
MO	DOI	Nat. Migratory Bird Refuges	Mingo	
MO	DOI	Nat. Migratory Bird Refuges	Squaw Cr.	
MO	DOI	Nat. Migratory Bird Refuges	Clarence Canyon	
MO Crawford	NPS	Nat. Scenic Rivers	Meramec River	Meramec State Park to Cook Station
MO Crawford	NPS	Nat. Scenic Rivers	Bourbeuse River	Noser Mill to Highway 8
MO Knox	NPS	Nat. Scenic Rivers	Middle Fabius River & N. Fork	N. Fabius River to source
MO Chariton	NPS	Nat. Scenic Rivers	Locust Creek	Grant River to Hwy. 36
MO Cedar	NPS	Nat. Scenic Rivers	Cedar Creek	Sac River to source
MO Douglas	NPS	Nat. Scenic Rivers	Bryant Creek	N. Fork White River to Hwy. 14
MO Gasconade	NPS	Nat. Scenic Rivers	Bourbeuse River	Noser Mill to Highway 8
MO Newton	NPS	Nat. Scenic Rivers	Shoal Creek	
MO Schuyler	NPS	Nat. Scenic Rivers	Middle Fabius River & N. Fork	N. Fabius River to source
MO St. Francois	NPS	Nat. Scenic Rivers	St. Francis River	Lake Wappapello to Syenite
MO Scotland	NPS	Nat. Scenic Rivers	Middle Fabius River & N. Fork	N. Fabius River to source
MO Douglas	NPS	Nat. Scenic Rivers	North Fork White River	Norfolk Lake to source
MO Knox	NPS	Nat. Scenic Rivers	South Fabius River	County Hwy. E. to confluence of N. & S. Forks
MO Texas	NPS	Nat. Scenic Rivers	North Fork White River	Norfolk Lake to source
MO Lincoln	NPS	Nat. Scenic Rivers	West Fork Cuivre River	Cuivre River to County Hwy. AC
MO Boone	NPS	Nat. Scenic Rivers	Cedar Creek	Missouri River to Hwy. WW
MO Montgomery	NPS	Nat. Scenic Rivers	West Fork Cuivre River	Cuivre River to County Hwy. AC
MO Lawrence	NPS	Nat. Scenic Rivers	Spring River	Highway 96 to Hwy. 44
MO Dade	NPS	Nat. Scenic Rivers	Cedar Creek	Sac River to source
MO Reynolds	NPS	Nat. Scenic Rivers	Black River	Hwy. K to source
MO Washington	NPS	Nat. Scenic Rivers	Mineral Fork	Big River to Hwy. F
MO Franklin	NPS	Nat. Scenic Rivers	Bourbeuse River	Noser Mill to Highway 8
MO Phelps	NPS	Nat. Scenic Rivers	Meramec River	Meramec State Park to Cook Station
MO Lewis	NPS	Nat. Scenic Rivers	Middle Fabius River & N. Fork	N. Fabius River to source
MO Callaway	NPS	Nat. Scenic Rivers	Cedar Creek	Missouri River to Hwy. WW
MO Barry	NPS	Nat. Scenic Rivers	Shoal Creek	Spring River to source
MO Ozark	NPS	Nat. Scenic Rivers	Bryant Creek	N. Fork White River to Hwy. 14
MO Madison	NPS	Nat. Scenic Rivers	St. Francis River	Lake Wappapello to Syenite
MO Sullivan	NPS	Nat. Scenic Rivers	Locust Creek	End channelization to sect. 28

ENVIRONMENTALLY SENSITIVE AREAS

REGION VII A

MO Ozark	NPS	Nat. Scenic Rivers	North Fork White River	Norfolk Lake to source
MO Crawford	NPS	Nat. Scenic Rivers	Courtois Creek	Huzzah Creek to Brazil
MO Livingston	NPS	Nat. Scenic Rivers	Locust Creek	Grant River to Hwy. 36
MO Franklin	NPS	Nat. Scenic Rivers	Meramec River	Meramec State Park to Cook Station
MO Phelps	NPS	Nat. Scenic Rivers	Bourbeuse River	Noser Mill to Highway 8
MO Washington	NPS	Nat. Scenic Rivers	Courtois Creek	Huzzah Creek to Brazil
MO Jasper	NPS	Nat. Scenic Rivers	Jasper & Lawrence	DOI/National Park Service
MO Washington	NPS	Nat. Scenic Rivers	Meramec River	Meramec State Park to Cook Station
MO Daviess	NPS	Nat. Scenic Rivers	Marrowbone Creek	Hwy. 13 to I-35
MO Linn	NPS	Nat. Scenic Rivers	Locust Creek	Grant River to Hwy. 36
MO Wayne	NPS	Nat. Scenic Rivers	St. Francis River	Lake Wappapeillo to Syenite
MO Crawford	NPS	Nat. Scenic Rivers	Huzzah Creek	Meramec River to Dillard
MO	TNC	Project Areas	None	
MO	USFS	Research Areas	None	
MO Jasper	TNC	St Conservancy Preserves	Wha-Sha-She Prairie	
MO Laclede	TNC	St Conservancy Preserves	Bennett Spring Savanna	
MO Dent	TNC	St Conservancy Preserves	Hyer Woods	
MO Crawford	TNC	St Conservancy Preserves	Zahorsky Woods	
MO Shannon	TNC	St Conservancy Preserves	N. B. Altwater Shut-in-Mtn Fens	
MO Vernon	TNC	St Conservancy Preserves	Little Osage Prairie	
MO Barton	TNC	St Conservancy Preserves	Pawhuska Prairie	
MO Vernon	TNC	St Conservancy Preserves	Warmaton R. Bottoms Wet Prairie	
MO Barton	TNC	St Conservancy Preserves	Shelton L. Cook Memorial Meadow	
MO Vernon	TNC	St Conservancy Preserves	Gamagrass Meadows	
MO Douglas	TNC	St Conservancy Preserves	Alma Peterson Azalea Memorial	
MO Nodaway	TNC	St Conservancy Preserves	Dobbins Woodlands	
MO Douglas	TNC	St Conservancy Preserves	Williams Memorial Woods	
MO Lewis	TNC	St Conservancy Preserves	Accola Woods	
MO Barton	TNC	St Conservancy Preserves	Tri-Sho Prairie	
MO Jefferson	TNC	St Conservancy Preserves	N. B. Altwater LaBarque Hills	
MO Saint Clair	TNC	St Conservancy Preserves	Lichen Glade	
MO Saint Francois	TNC	St Conservancy Preserves	Silas Dees Azalea & Wildflower	
MO Dade	TNC	St Conservancy Preserves	N. B. Altwater Corry Flatrocks	
MO Reynolds	TNC	St Conservancy Preserves	Lily Pond	
MO Dade	TNC	St Conservancy Preserves	Greenfield Glade	
MO Barton	TNC	St Conservancy Preserves	Hunkah Prairie	
MO Benton	TNC	St Conservancy Preserves	Rockhill Prairie	
MO Holt	TNC	St Conservancy Preserves	J. C. McCormack Loess Mounds	
MO Saint Clair	TNC	St Conservancy Preserves	Wah 'Kon-Tah Prairie	
MO Boone	TNC	St Conservancy Preserves	Hinkson Valley	
MO Cedar	TNC	St Conservancy Preserves	Mo-Ko Prairie	
MO Reynolds	TNC	St Conservancy Preserves	N.B. Altwater Grasshopper Hollow	
MO Cedar	TNC	St Conservancy Preserves	Nonegaw Prairie	
MO Clinton	TNC	St Conservancy Preserves	Trice-Dedman Memorial Woods	
MO Lawrence	TNC	St Conservancy Preserves	Mount Vernon Prairie	
MO Ripley	TNC	St Conservancy Preserves	N. B. Altwater Pondberry	
MO Jefferson	TNC	St Conservancy Preserves	Victoria Glade	
MO Dade	TNC	St Conservancy Preserves	Niawathe Prairie	
MO	NAS	Wildlife Sanctuaries	None	
NE	NPS	Biosphere Reserve	None	
NE	BIA	Federal Indian Reservation	Omaha	
NE	BIA	Federal Indian Reservation	Santee Sioux	
NE	BIA	Federal Indian Reservation	Winnebago	
NE	COE	Large Reservoirs	Harlan County Lake	
NE	FWS	National Fish Hatchery	Crawford NFH	
NE	NPS	National Parks	Agate Fossil Beds Nat. Monument 20 Mi. N. Harrison	

ENVIRONMENTALLY SENSITIVE AREAS

REGION VII

NE	NPS	National Parks	Missouri Nat. Recreational River	Ponca State Park, N. to border
NE	NPS	National Parks	Homestead Nat. Monument of Ameri	4.5 Mi. W. of Beatrice
NE	NPS	National Parks	Chimney Rock Nat. Historic Site	19 Mi. E. of Gering/Hwy. 92
NE	NPS	National Parks	Scotts Bluff Nat. Monument	5 Mi. S.W. of Scottsbluff
NE	FWS	National Wilderness Areas	Fort Niobrara	Fort Niobrara NWR
NE	USFS	National Wilderness Areas	Soldier Creek	Nebraska NF
NE	FWS	National Wildlife Refuge	North P	North Platte NWR
NE	FWS	National Wildlife Refuge	Fort Niobrara NWR	
NE	FWS	National Wildlife Refuge	Karl E. Mundt NWR	
NE	FWS	National Wildlife Refuge	Valentine NWR	
NE	FWS	National Wildlife Refuge	De Soto NWR	
NE	FWS	National Wildlife Refuge	Crescent Lake NWR	
NE Sarpy	NPS	Natural Landmarks	Fontenelle Forest	1 Mi. S. of Omaha
NE Lincoln	NPS	Natural Landmarks	Kissected Loess Plains	17 Mi. S.S.W. of Brady
NE Grant	NPS	Natural Landmarks	Nebraska Sand Hills	Immediately S. of Hyannis
NE Cherry	NPS	Natural Landmarks	Valentine Nat. Wildlife Refuge	25 Mi. S. of Valentine
NE	DOI	Nat. Migratory Bird Refuges	Crescent Lake	
NE	DOI	Nat. Migratory Bird Refuges	Valentine	
NE Thomas	NPS	Nat. Scenic Rivers	Middle Loup River	Milburn Diversion Dam to source
NE Holt	NPS	Nat. Scenic Rivers	Niobrara River	Keya Paha River to Antelope Creek
NE Thomas	NPS	Nat. Scenic Rivers	Dismal River	Middle Loup River to source
NE Knox	NPS	Nat. Scenic Rivers	Niobrara River	Missouri River to Keya Paha River
NE Garfield	NPS	Nat. Scenic Rivers	Calamus River	North Loup River to source
NE Blaine	NPS	Nat. Scenic Rivers	Middle Loup River	Milburn Diversion Dam to source
NE Cherry	NPS	Nat. Scenic Rivers	Snake River	Niobrara River to source
NE Holt	NPS	Nat. Scenic Rivers	Niobrara River	Missouri River to Keya Paha River
NE Sheridan	NPS	Nat. Scenic Rivers	Snake River	Niobrara River to source
NE Blaine	NPS	Nat. Scenic Rivers	Dismal River	Middle Loup River to source
NE Boyd	NPS	Nat. Scenic Rivers	Missouri River	Running Water, SD to Fort Randall Dam
NE Boyd	NPS	Nat. Scenic Rivers	Niobrara River	Keya Paha River to Antelope Creek
NE Hooker	NPS	Nat. Scenic Rivers	Middle Loup River	Milburn Diversion Dam to source
NE Keya Paha	NPS	Nat. Scenic Rivers	Niobrara River	Keya Paha River to Antelope Creek
NE Rock	NPS	Nat. Scenic Rivers	Long Pine Creek	Niobrara River to source
NE Brown	NPS	Nat. Scenic Rivers	Niobrara River	Keya Paha River to Antelope Creek
NE Brown	NPS	Nat. Scenic Rivers	Long Pine Creek	Niobrara River to source
NE Boyd	NPS	Nat. Scenic Rivers	Niobrara River	Missouri River to Keya Paha River
NE Knox	NPS	Nat. Scenic Rivers	Missouri River	Running Water, SD to Fort Randall Dam
NE Brown	NPS	Nat. Scenic Rivers	Calamus River	North Loup River to source
NE Cherry	NPS	Nat. Scenic Rivers	Niobrara River	Keya Paha River to Antelope Creek
NE Rock	NPS	Nat. Scenic Rivers	Niobrara River	Keya Paha River to Antelope Creek
NE Loup	NPS	Nat. Scenic Rivers	Calamus River	North Loup River to source
NE Rock	NPS	Nat. Scenic Rivers	Calamus River	North Loup River to source
NE Cherry	NPS	Nat. Scenic Rivers	Middle Loup River	Milburn Diversion Dam to source
NE Scotts Bluff	TNC	Project Areas	Kiowa WMA	
NE Arthur	TNC	Project Areas	Arapaho Prairie	
NE Webster	TNC	Project Areas	Villa Cathar Memorial Prairie	
NE Pawnee	TNC	Project Areas	Pawnee Prairie WMA	
NE Fillmore	TNC	Project Areas	Marsh Hawk WMA	
NE Fillmore	TNC	Project Areas	Real WPA	
NE Cherry, Brown	TNC	Project Areas	Niobrara Valley Preserve	
NE Washington	TNC	Project Areas	Cuming City Cemetery	
NE	TNC	Project Areas	Platte River	
NE Richardson	TNC	Project Areas	Rulo Bluffs	
NE Thayer	TNC	Project Areas	Prairie march WMA	
NE Lincoln	TNC	Project Areas	Huskrat Run WMA	302 acres, N. Platte River
NE Garden	TNC	Project Areas	Graves Ranch	

ENVIRONMENTALLY SENSITIVE AREAS

REGION VII ACT

NE Scotts Bluff	TNC	Project Areas
NE Thomas	USFS	Research Areas
NE Rock	NAS	Wildlife Sanctuaries
NE	NAS	Wildlife Sanctuaries

Scotts Bluff Monument
Signal Hill
Niobrara River
Lillian Annette Rowe

Rock County, NE
Gibbon, NE

COE = U.S. Army Corps of Engineers
NPS = DOI/National Park Service
FWS = Fish & Wildlife Service
DOI = Department of the Interior
TNC = The Nature Conservancy
USFS = United States Forest Service
NAS = National Audubon Society
IDNR = Iowa Department of Natural Resources
KDWP = Kansas Department of Wildlife & Parks
BIA = Bureau of Indian Affairs

#1. Wetlands

Due to the large number of wetlands in Region VII, wetlands are not listed on the following list of ESAs. Instead, a listing of wetland map names is available through EPA Region VII, 25 Funston Road, Kansas City, Kansas, 66115, (913) 551-5000. Maps of the wetlands categorized in Region VII are available through:

Department of the Interior
Geological Survey
Reston, Virginia 22092.

The following list is an example of the wetland map names contained within the database at EPA Region VII. Locating a particular area is illustrated in the following figures:

12/17/93

NWI MAPS IN THE WETLANDS PROTECTION SECTION: [SCALE=1:RATIO]
 [MAP PRODUCTS: D=DRAFT, F=FINAL, P=PHOTO-ENLARGEMENT]
 [# & TYPE PRODUCTS: NUMBER PER MAP PRODUCT]
 [GIS PRODUCTS: D=DIGITIZED, A=ARCINFO FORMAT]

MAP UNIT	ST	MAP MAP SCALE STATUS (1:_) D,F,P	# & TYPE PRODUCTS	PUB YEAR	PHOTO DATE	GIS (D, A)
# 2362						
Q=AINSWORTH 42099-E1	NE	100000 F	32 F		/ /	
Q=ALED0 41090-A1	IL-IA	100000 F,D	6 F, 6 D	1988	/ /	
Q=ALLIANCE 42102-A1	NE	100000 F	32 F		/ /	
Q=AMES 42093-A1	IA	100000 D	32 D		/ /	
Q=ANAMOSA 42091-A1	IA	100000 D	32 D		/ /	
Q=ARTHUR 41101-E1	NE	100000 F	32 F		/ /	
Q=ATCHISON 39095-E1	KS-MO	100000 D	32 D		/ /	
Q=ATKINSON 42098-E1	NE	100000 F	30 F		/ /	
Q=AUSTIN 43092-E1	MN-IA	100000 D	6 D		/ /	
Q=BEATRICE 40096-A1	NE	100000 F	32 F		/ /	
Q=BLAIR 41096-E1	NE	100000 F	32 F		/ /	
Q=BROKEN BOW 41099-A1	NE	100000 F	32 F		/ /	
Q=BURLINGTON 40091-E1	IA	100000 D,F	26 D, 4 F		/ /	
Q=BURWELL 41099-E1	NE	100000 F	32 F		/ /	
Q=BUTLER 38094-A1	MO	100000 F	32 F		/ /	
Q=CAPE GIRARDEAU 37089-A1	MO	100000 P/F	9 P/15 F		/ /	
Q=CARBONDALE 37089-E1	MO	100000 P/F	16 P/5 F		/ /	
MO-IL						
Q=CARROLL 42094-A1	IA	100000 D	32 D		/ /	
Q=CENTERVILLE 40092-E1	IA	100000 D	32 D		/ /	
Q=CHAPPELL 41102-A1	NE	100000 F	32 F		/ /	
Q=CHARLES CITY 43092-A1	IA	100000 F	32 F		/ /	
Q=CHYENNE 41104-A1	WY-NE	100000 D	4 D		/ /	
Q=CHILLICOTHE 39093-E1	MO	100000 F,P	31 F, 48P	1993	/ /	
Q=CHUGWATER 41104-E1	WY-NE	100000 D	4 D		/ /	
Q=CODY 42101-E1	NE	100000 F	32 F		/ /	
Q=CRAWFORD 42103-E1	NE	100000 F	32 F		/ /	
Q=CRESCENT LAKE 41102-E1	NE	100000 F	32 F		/ /	
Q=CRESTON 41094-A1	IA	100000 D	32 D		/ /	
Q=DAVENPORT 41090-E1	IA	100000 D	26 D		/ /	
Q=DAVID CITY 41097-A1	NE	100000 F	32 F		/ /	
Q=DECORAH 43091-A1	IA	100000 D	30 D		/ /	
Q=DES MOINES 41093-E1	IA	100000 D	32 D		/ /	
Q=DISMAL RIVER 41100-E1	NE	100000 F	32 F		/ /	
Q=DODGE CITY 37100-E1	KS	100000 F	32 F	1990	/ /	
Q=DUBUQUE NORTH 42090-E1	IA-WI	100000 D	6 D		/ /	
Q=DUBUQUE SOUTH 42090-A1	IA	100000 P	36 P		/ /	
Q=ESTHERVILLE 43094-A1	IA	100000 F	32 F		/ /	

NWI MAPS IN THE WETLANDS PROTECTION SECTION: [SCALE=1:RATIO]
[MAP PRODUCTS: D=DRAFT, F=FINAL, P=PHOTO-ENLARGEMENT]
[# & TYPE PRODUCTS: NUMBER PER MAP PRODUCT]
[GIS PRODUCTS: D=DIGITIZED, A=ARCINFO FORMAT]

MAP UNIT	ST	MAP MAP SCALE STATUS (1:_) D,F,P	# & TYPE PRODUCTS	PUB YEAR	PHOTO DATE	GIS (D, A)
Q=FAIRBURY 40097-A1	NE	100000 F	32 F		/ /	
Q=FAIRMONT 43094-E1	IA	100000 F	7 F		/ /	
Q=FALLS CITY 40095-A1	MO	100000 PDF	33P/7D/11F		/ /	
Q=FARMINGTON 37090-E1	MO	100000 F	32 F		/ /	
Q=FESTUS 38090-A1	MO	100000 F	26 F		/ /	
Q=FREMONT 41096-A1	NE	100000 F	32 F		/ /	
Q=FULTON 38091-E1	MO	100000 F,P	32 F, 50P	1993	/ /	
Q=GOOSE CREEK 42100-A1	NE	100000 F	32 F		/ /	
Q=GORDON 42102-E1	NE	100000 F	32 F		/ /	
Q=GOTHENBURG 40100-E1	NE	100000 F	32 F		/ /	
Q=GRAND ISLAND 40098-E1	NE	100000 F	32 F		/ /	
Q=GREAT BEND 38098-A1	KS	100000 F	32 F		/ /	
Q=GRINNELL 41092-E1	IA	100000 D	32 D		/ /	
Q=GUTHRIE CENTER 41094-E1	IA	100000 F	32 F		/ /	
Q=GUYPON 36101-E1	KS-OK	100000 D	8 D		/ /	
Q=HARLAN 41095-E1	IA	100000 F	32 F		/ /	
Q=HARRY S. TRUMAN RESV 38093 A1	MO	100000 F	32 F	1993	/ /	
Q=HEMINGFORD 42103-A1	NE	100000 F	32 F		/ /	
Q=HOLDREGE 40099-A1	NE	100000 F	32 F		/ /	
Q=HUGOTON 37101-A1	KS	100000 F	32 F		/ /	
Q=HUMBOLDT 42094-E1	IA	100000 D	32 D		/ /	
Q=IDA GROVE 42095-A1	IA	100000 D	32 D		/ /	
Q=IMPERIAL 40101-E1	NE	100000 F	32 F		/ /	
Q=INDIANOLA 41093-A1	IA	100000 D	32 D		/ /	
Q=IOWA CITY 41091-E1	IA	100000 D	32 D		/ /	
Q=IOWA FALLS 42093-E1	IA	100000 D	32 D		/ /	
Q=IOWA GREAT LAKES 43095-A1	IA	100000 F	32 F		/ /	
Q=JEFFERSON CITY 38092-E1	MO	100000 P	48 P		/ /	
Q=JERSEYVILLE 39090-A1	MO-IL	100000 F	10 F		/ /	
Q=JOPLIN 37094-A1	MO-ks	100000 P	30 P		/ /	
Q=KANSAS CITY 39094-A1	MO-KS	100000 DPF	4D,44P,28F		/ /	
Q=KEARNEY 40099-E1	NE	100000 F	32 F		/ /	
Q=KEOKUK 40091-A1	IA-MO	100000 F	32 F		/ /	
Q=KIMBALL 41103-A1	NE	100000 F	32 F		/ /	
Q=KINSLEY 37099-E1	KS	100000 F	32 F		/ /	
Q=KIRKSVILLE 40092-A1	MO	100000 P	48 P		/ /	
Q=LA CROSSE 43091-E1	MN-IA	100000 F	7 F		/ /	
Q=LAKE OF THE OZARKS 38092-E	MO	100000 F	32 F	1993	/ /	
Q=LARNED 38099-A1	KS	100000 F	32 F		/ /	

NWI MAPS IN THE WETLANDS PROTECTION SECTION: [SCALE=1:RATIO]
[MAP PRODUCTS: D=DRAFT, F=FINAL, P=PHOTO-ENLARGEMENT]
[# & TYPE PRODUCTS: NUMBER PER MAP PRODUCT]
[GIS PRODUCTS: D=DIGITIZED, A=ARCINFO FORMAT]

MAP UNIT	ST	MAP MAP SCALE STATUS (1:_) D,F,P	# & TYPE PRODUCTS	PUB YEAR	PHOTO DATE	GIS (D, A)
Q=LAWRENCE 38095-E1	KS	100000 D	32 D		/ /	
Q=LEBANON 37092-E1	MO	100000 P,F	49 P/9 F		/ /	
Q=LEON 40093-E1	IA-MO	100000 D	32 D		/ /	
Q=LEOTT 38101-A1	KS	100000 F	32 F		/ /	
Q=LIBERAL 37100-A1	KS	100000 F	32 F		/ /	
Q=LINCOLN 40096-E1	NE	100000 F	32 F		/ /	
Q=LUSK 42104-E1	WY-NE	100000 D	4 D		/ /	
Q=MACON 39092-E1	MO	100000 P	48 P		/ /	
Q=MANHATTAN 39096-A1	KS	100000 D,F	7 F/25 D		/ /	
Q=MARSHALL 39093-A1	MO	100000 P/D	51 P/2D		/ /	
Q=MARSHALLTOWN 42092-A1	IA	100000 D	32 D		/ /	
Q=MARYVILLE 40094-A1	MO	100000 P	48 P		/ /	
Q=MASON CITY 43093-A1	IA	100000 F	32 F		/ /	
Q=MEXICO 39091-A1	MO	100000 F	32 F		/ /	
Q=MOBERLY 39092-A1	MO	100000 F,P	32 F, 49 P 1993		/ /	
Q=MT AYR 40094-E1	MO-IA	100000 P	17 P		/ /	
Q=MULLEN 42101-A1	NE	100000 F	32 F		/ /	
Q=MUSCATINE 41091-A1	IA	100000 D	32 D		/ /	
Q=NEBRASKA CITY 40095-E1	IA-MO	100000 F	32 F	1992	/ /	
Q=NEOSHO 36094-A1	MO	100000 F	32 F		/ /	
Q=NEVADA 37094-E1	MO	100000 F	32 F		/ /	
Q=NORFOLK 42097-A1	NE	100000 F	32 F		/ /	
Q=NORTH PLATTE 41100-A1	NE	100000 F	32 F		/ /	
Q=O'NEILL 42098-A1	NE	100000 F	30 F		/ /	
Q=OELWEIN 42091-E1	IA	100000 D	32 D		/ /	
Q=OGALLALA 41101-A1	NE	100000 F	32 F		/ /	
Q=OLATHE 38094-E1	KS-MO	100000 D,P	16 D,29 P		/ /	
Q=OMAHA 41095-A1	IA	100000 F	32 F		/ /	
Q=ORD 41098-E1	NE	100000 F	30 F		/ /	
Q=OSKALOOSA 41092-A1	IA	100000 D	32 D		/ /	
Q=PIEDMONT 37090-A1	MO	100000 F	32 F		/ /	
Q=POPLAR BLUFF 36090-E1	MO	100000 F	32 F		/ /	
Q=PROTECTION 37099-A1	KS	100000 F	32 F		/ /	
Q=QUINCY 39091-E1	MO-IL	100000 F	26 F		/ /	
Q=RED CLOUD 40098-A1	NE	100000 F	31 F		/ /	
Q=ROCK RAPIDS 43096-A1	IA-SD	100000 F	19 F		/ /	
Q=ROSE 42099-A1	NE	100000 F	32 F		/ /	
Q=SAINT JOSEPH 39094-E1	MO-KS	100000 P,D	52 P, 5 D		/ /	
Q=SAINT LOUIS 38090-E1	MO-IL	100000 F	29 F	1993	/ /	
Q=SAINT PAUL 41098-A1	NE	100000 F	32 F		/ /	
Q=SCOTT CITY 38100-A1	KS	100000 F	32 F		/ /	

NWI MAPS IN THE WETLANDS PROTECTION SECTION: [SCALE=1:RATIO]
[MAP PRODUCTS: D=DRAFT, F=FINAL, P=PHOTO-ENLARGEMENT]
[# & TYPE PRODUCTS: NUMBER PER MAP PRODUCT]
[GIS PRODUCTS: D=DIGITIZED, A=ARCINFO FORMAT]

MAP UNIT	ST	MAP MAP SCALE STATUS (1:_) D,F,P	# & TYPE PRODUCTS	PUB PHOTO YEAR DATE	GIS (D, A)
Q=SCOTTSBLUFF 41103-E1	NE	100000 F	32 F	/ /	
Q=SEDALIA 38093-E1	MO	100000 P	49 P	/ /	
Q=SIKESTON 36089-E1	MO	100000 D/F	11D/21F	/ /	
Q=SIoux CITY NORTH 42096-E1	IA-NE	100000 F	28 F	/ /	
Q=SIoux CITY SOUTH 42096-A1	IA-NE	100000 F	32 F	/ /	
Q=SIoux FALLS 43096-E1	MN-IA	100000 F	3 F	/ /	
Q=STANTON 41097-E1	NE	100000 F	32 F	/ /	
Q=STORM LAKE 42095-E1	IA	100000 D	32 D	/ /	
Q=TOPEKA 39095-A1	KS	100000 D	32 D	/ /	
Q=TORRINGTON 42104-A1	WY-NE	100000 F	4 F	/ /	
Q=TRENTON 40093-A1	MO	100000 P	50 P	/ /	
Q=ULYSSES 37101-E1	KS	100000 F	32 F	/ /	
Q=VALENTINE 42100-E1	NE	100000 F	32 F	/ /	
Q=WAVERLY 42092-E1	IA	100000 D	32 D	/ /	
Q=YANKTON 42097-E1	NE	100000 F	24 F	/ /	
Q=YORK 40097-E1	NE	100000 F	32 F	/ /	
*** Total ***					

134 records

U.S. DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

Prepared by National Wetlands Inventory

SYSTEM

R — RIVERINE

SUBSYSTEM	1 — TIDAL	2 — LOWER PERENNIAL	3 — UPPER PERENNIAL	4 — INTERMITTENT	5 — UNKNOWN PERENNIAL			
CLASS	RB — ROCK	UB — UNCONSOLIDATED BOTTOM	*SB — STREAMBED	AB — AQUATIC BED	RS — ROCKY SHORE	US — UNCONSOLIDATED SHORE	**EM — EMERGENT	OW — OPEN WATER/ Unknown Bottom
Subclass	1 Bedrock 2 Rubble	1 Cobble Gravel 2 Sand 3 Mud 4 Organic	1 Bedrock 2 Rubble 3 Cobble Gravel 4 Sand 5 Mud 6 Organic 7 Vegetated	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown 6 Submergent 7 Unknown Surface	1 Bedrock 2 Rubble	1 Cobble Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	2 Nonpersistent	

*STREAMBED is limited to TIDAL and INTERMITTENT SUBSYSTEMS and comprises the only CLASS in the INTERMITTENT SUBSYSTEM

**EMERGENT is limited to TIDAL and LOWER PERENNIAL SUBSYSTEMS. The remaining CLASSES are found in all SUBSYSTEMS

SYSTEM

P — PALUSTRINE

CLASS	RB — ROCK BOTTOM	UB — UNCONSOLIDATED BOTTOM	AB — AQUATIC BED	US — UNCONSOLIDATED SHORE	ML — MOSS-LICHEN	EM — EMERGENT	SS — SCRUB-SHRUB	FO — FORESTED	OW — OPEN WATER/ Unknown Bottom
Subclass	1 Bedrock 2 Rubble	1 Cobble Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface	1 Cobble Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	1 Moss 2 Lichen	1 Persistent 2 Nonpersistent	1 Broad-Leaved Deciduous 2 Deciduous 3 Needle-Leaved Deciduous 4 Broad-Leaved Evergreen 5 Deciduous 6 Broad-Leaved Evergreen 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Deciduous 6 Deciduous 7 Evergreen	

L — LACUSTRINE

1 — LIMNETIC

2 — LITTORAL

RB — ROCK BOTTOM	UB — UNCONSOLIDATED BOTTOM	AB — AQUATIC BED	OW — OPEN WATER/ Unknown Bottom	RB — ROCK BOTTOM	UB — UNCONSOLIDATED BOTTOM	AB — AQUATIC BED	RS — ROCKY SHORE	US — UNCONSOLIDATED SHORE	EM — EMERGENT	OW — OPEN WATER/ Unknown Bottom
1 Bedrock 2 Rubble	1 Cobble Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface		1 Bedrock 2 Rubble	1 Cobble Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface	1 Bedrock 2 Rubble	1 Cobble Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	2 Nonpersistent	

MODIFIERS

In order to more adequately describe wetland and deepwater habitats one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The termed modifier may also be applied to the ecological system.

WATER REGIME

Non-Tidal

A Temporarily Flooded
B Saturated
C Seasonally Flooded
D Seasonally Flooded/
Well Drained
E Seasonally Flooded/
Saturated
F Semipermanently Flooded
G Intermittently Exposed

H Permanently Flooded
J Intermittently Flooded
K Artificially Flooded
L Intermittently
Flooded/Temporary
Saturated/Semipermanent/
Seasonal
Z Intermittently
Exposed/Permanent
U Unknown

Tidal

K Artificially Flooded
L Subtidal
M Irregularly Exposed
N Regularly Flooded
P Irregularly Flooded
S Temporary-Tidal
R Seasonal-Tidal
T Semipermanent-Tidal
V Permanent Tidal
U Unknown

*These water regimes are only used in
tidally influenced, freshwater systems

WATER CHEMISTRY

Coastal Salinity

1 Hyperhaline
2 Euxaline
3 Mixohaline (Brackish)
4 Polyhaline
5 Mesohaline
6 Oligohaline
7 Fresh

Inland Salinity

7 Hyperhaline
8 Euxaline
9 Mixohaline
0 Fresh

pH Modifiers for all Fresh Water

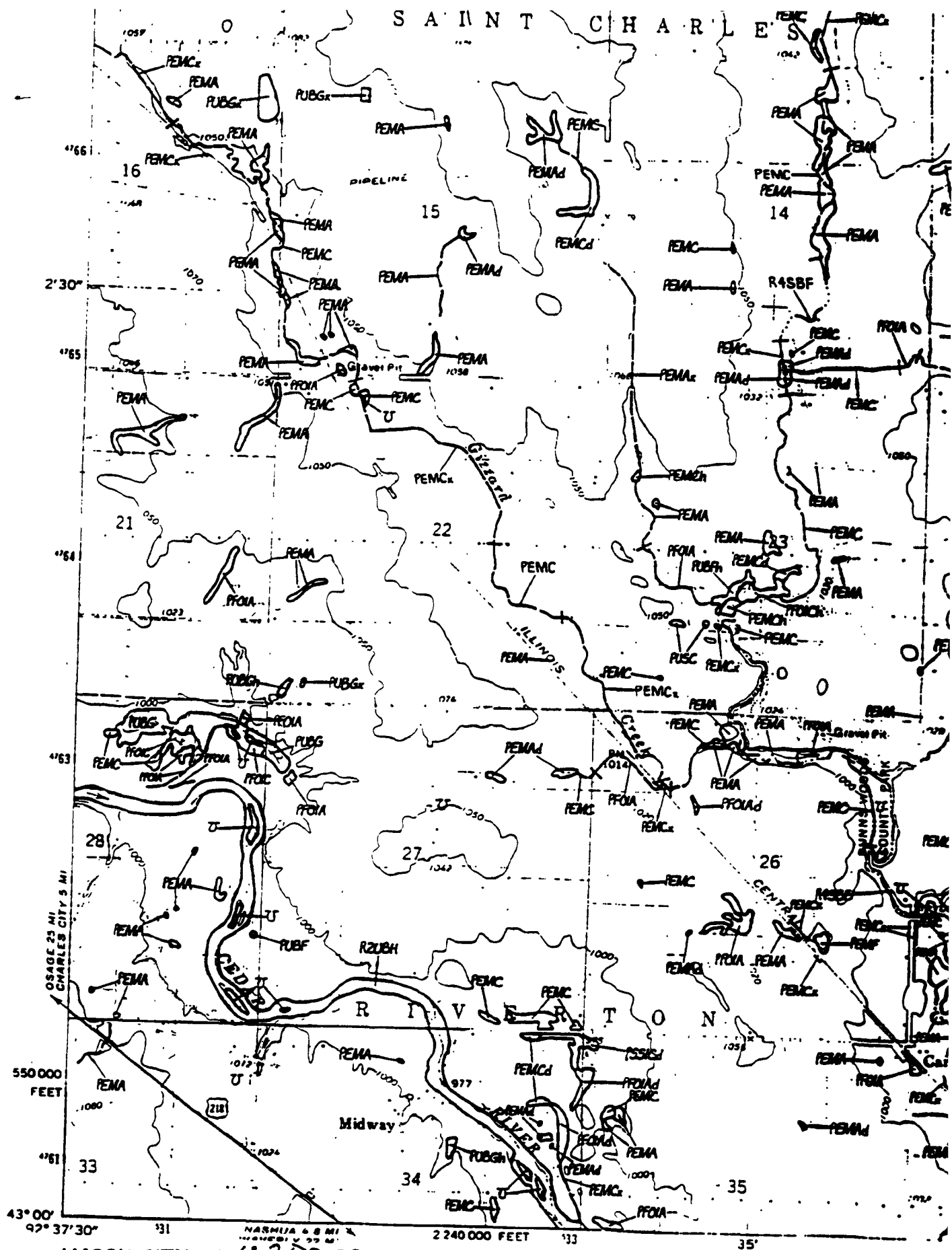
a Acid
c Circumneutral
i Alkaline

SOIL

g Organic
h Mineral

SPECIAL MODIFIERS

b Beaver
d Partially Drained/Ditched
f Farmed
h Diked/Impounded
i Artificial Substrate
s Spoil
n Excavated

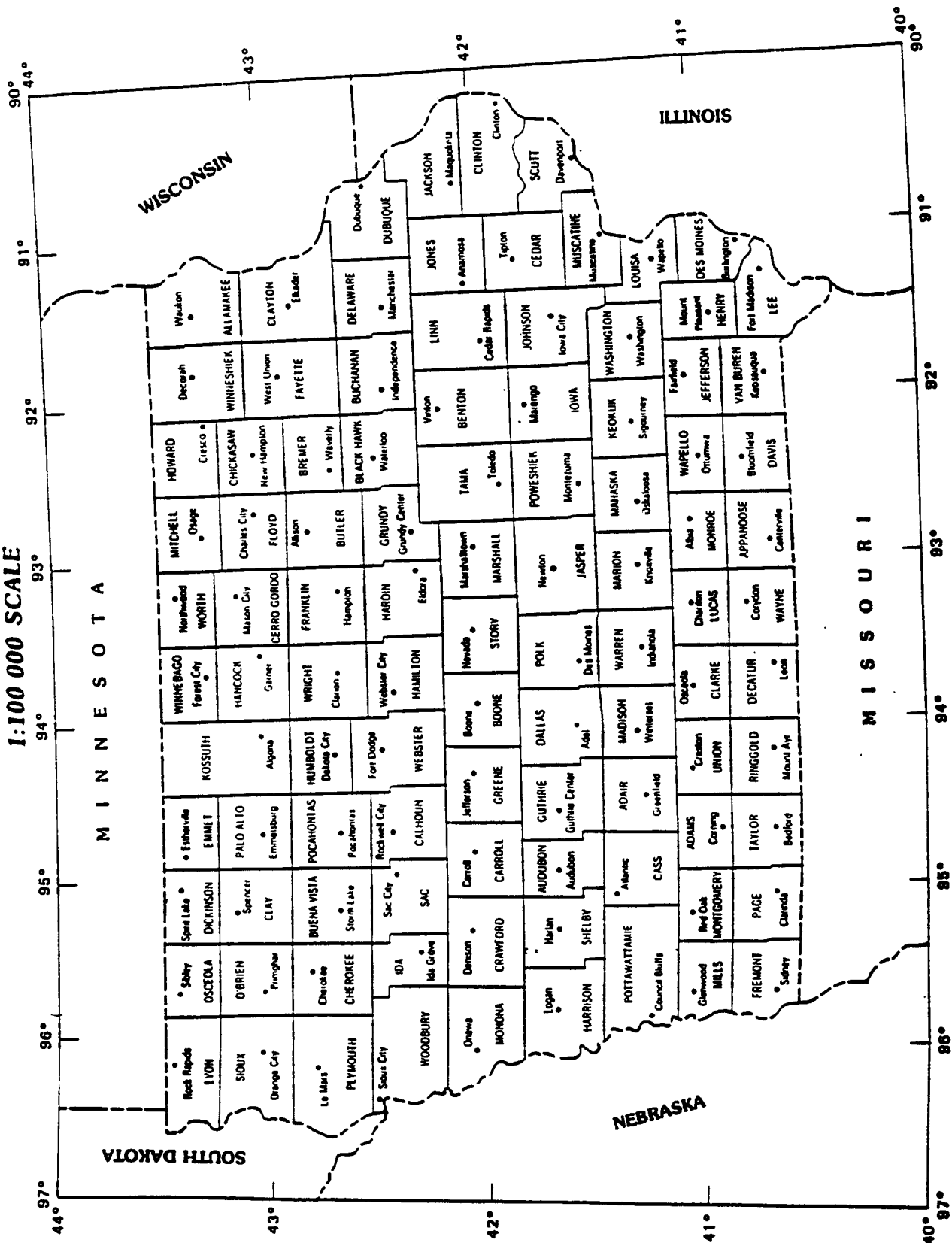


MASON CITY SE 1:250,000

CHARLES CITY 1:100,000

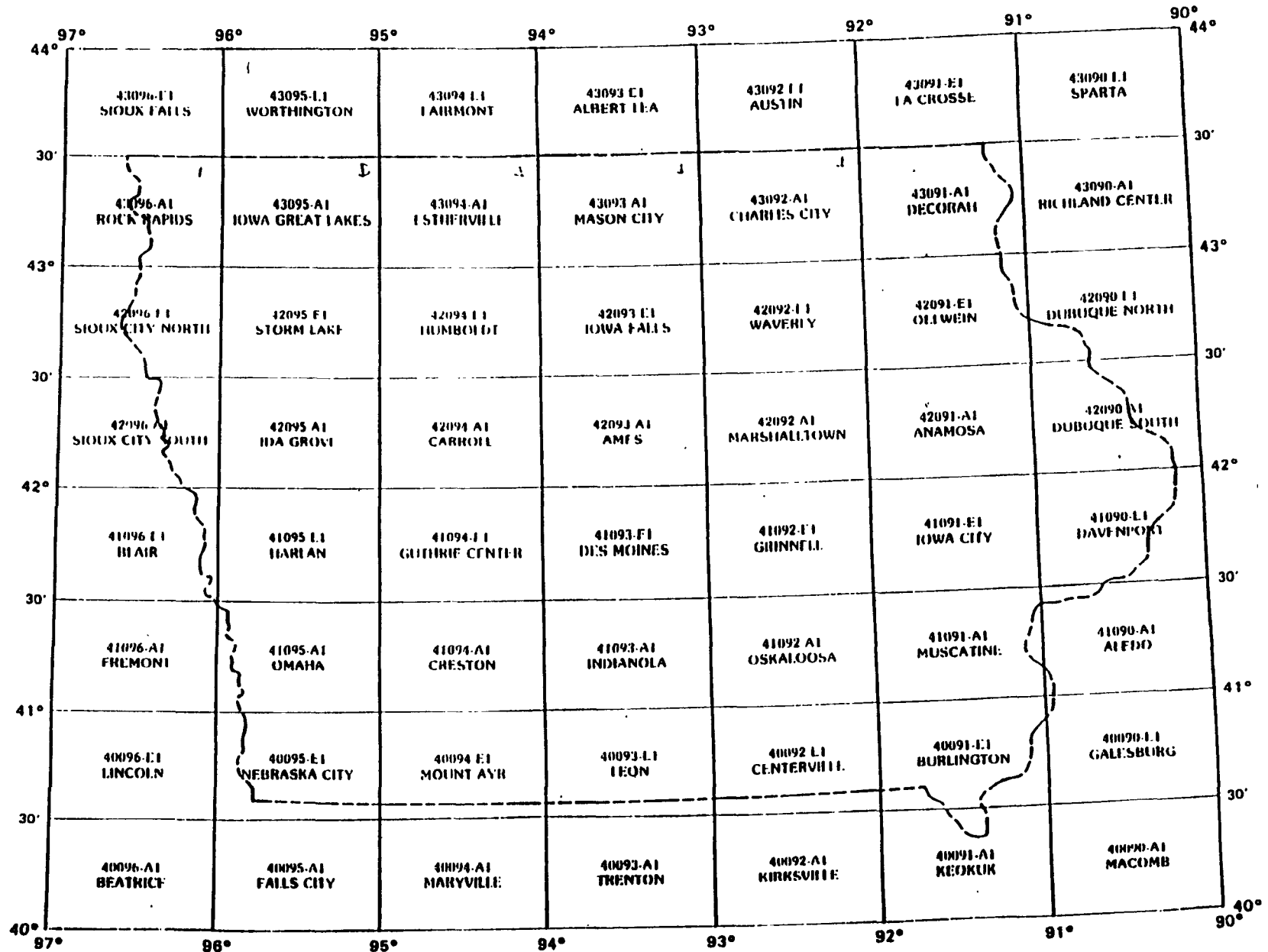
COUNTY MAP SERIES

1:100 000 SCALE



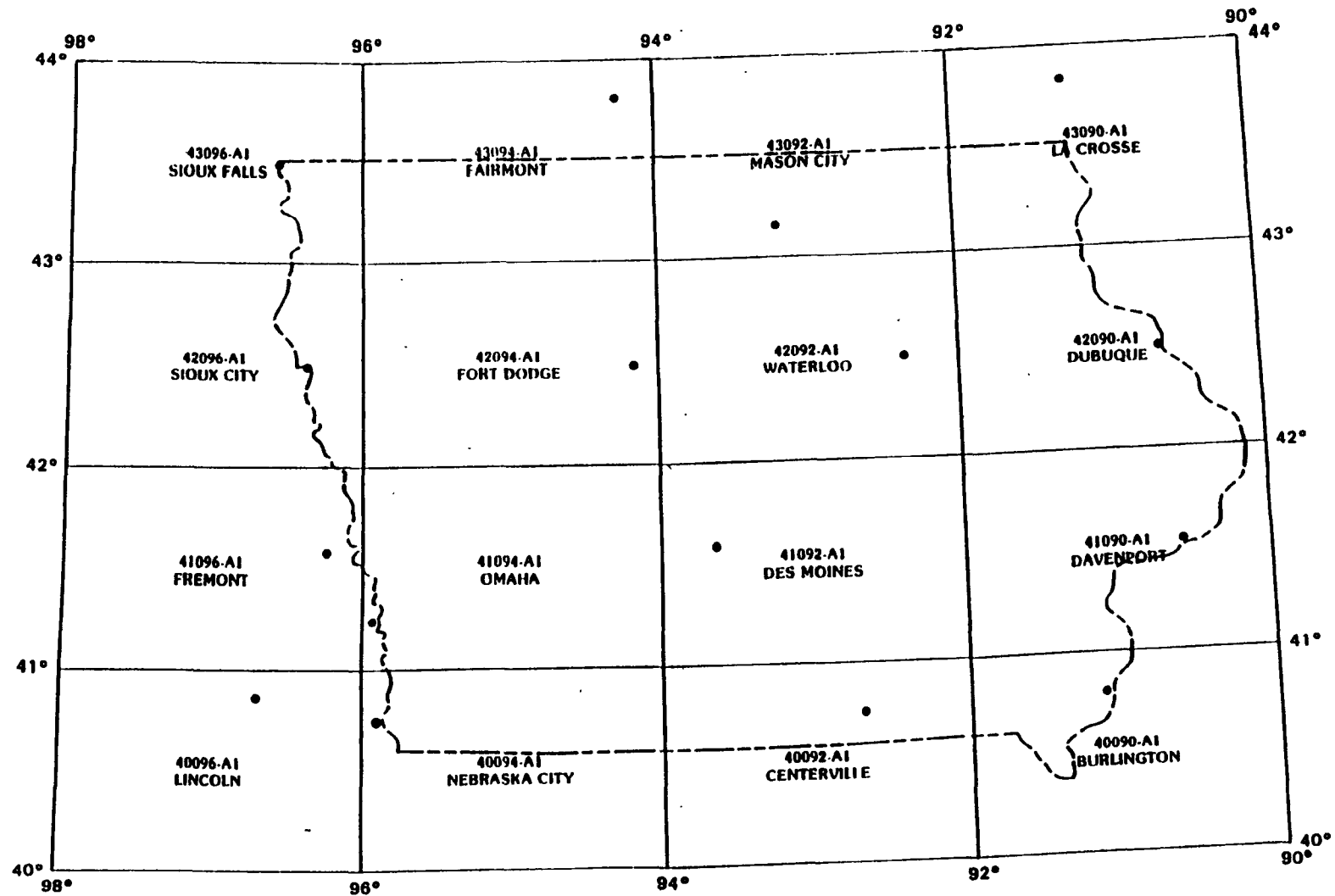
IOWA

30 X 60 MIN. SERIES 1:100 000 SCALE



1:100,000-scale maps are planned for the entire State
See CATALOG OF PUBLISHED MAPS for available maps, dates, prices, and Map Order Forms

1 X 2 DEGREE SERIES
1:250 000 SCALE



43092

7.5 MINUTE QUADRANGLE NAMES

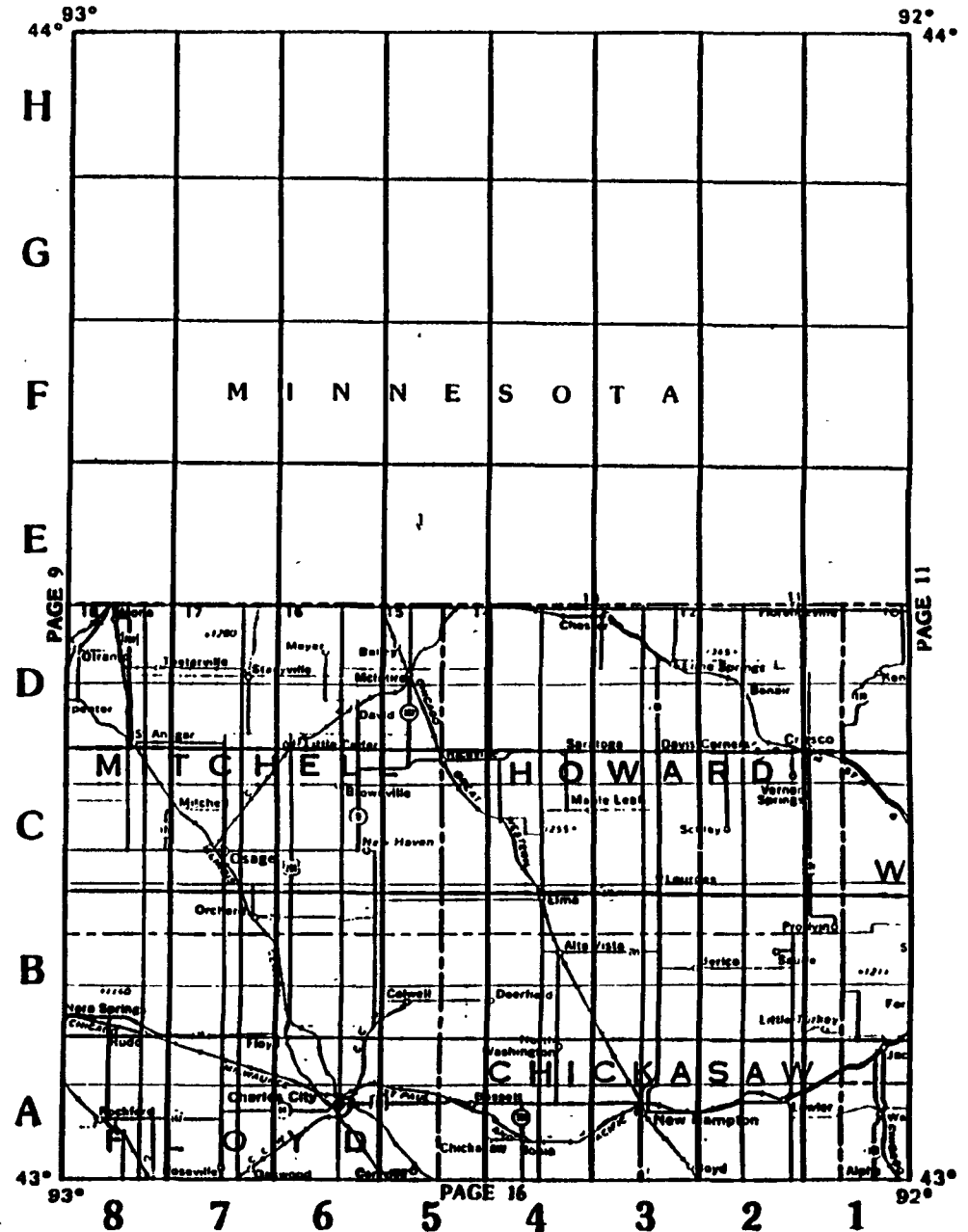
A1 Waucoma	E1 Harmony
A2 Lawler	E2 Greenleafton
A3 New Hampton	E3 Cherry Grove
A4 Ionia	E4 Ostrander
A5 Bassett	E5 Le Roy
A6 Charles City	E6 Adams
A7 Roseville	E7 Rose Creek
A8 Rockford	E8 Lyle
B1 Protivin	F1 Preston
B2 Sande	F2 Fountain
B3 Jerico	F3 Wykoff
B4 Elma	F4 Spring Valley
B5 Colwell	F5 Grand Meadow
B6 Floyd	F6 Dexter
B7 Orchard	F7 Brownsdale
B8 Rudd	F8 Austin East
C1 Cresco SE	G1 Pilot Mound
C2 Cresco SW	G2 Charfield
C3 Lourdes	G3 Washington
C4 Saratoga	G4 Stewartville
C5 Riceville	G5 High Forest
C6 New Haven	G6 High Forest SW
C7 Osage	G7 Sargeant
C8 Osage SW	G8 Waltham
D1 Cresco NE	H1 St. Charles
D2 Cresco NW	H2 Eyota
D3 Lime Springs	H3 Marlon
D4 Lime Springs NW	H4 Simpson
D5 McIntire	H5 Salem Corners
D6 Little Cedar	H6 Rock Dell
D7 Stacyville	H7 Hayfield
D8 St. Ansgar	H8 Hayfield NW

Iowa is completely covered by 7.5-minute maps

Certain areas may be covered by 7.5 x 15- or 15-minute maps

See CATALOG OF PUBLISHED MAPS for available maps, dates, scales, prices, and Map Order Forms

43092



#2 Federally Endangered Species

The following list identifies Federally listed or proposed United States endangered species by state and county. The county is considered the species' habitat in this document, as area specific locations cannot be listed due to protection concerns.

Following the Federal list of Endangered species are lists of threatened and endangered animal and plant species of wetlands and waterways. A sample of the first page for animal species and plant species by state are shown. A summery of the known habitat usage is given and accompanied by the listing of codes used. A summary of the entire database for threatened and endangered species of wetlands and waterways is located at EPA Region VII, 25 Funston Road, Kansas City, Kansas, 66115, (913) 551-5000.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

OFFICE OF PESTICIDE PROGRAMS' ENDANGERED SPECIES-BY-COUNTY LIST

DISCLAIMER

THE FOLLOWING LIST IDENTIFIES FEDERALLY LISTED OR PROPOSED U.S. SPECIES BY STATE AND COUNTY. IT WAS REVIEWED AND UPDATED (THROUGH OCTOBER 1, 1992) BY THE U.S. FISH AND WILDLIFE SERVICE.

WHILE THE LIST PROVIDES A REASONABLY ACCURATE GUIDE, IT SHOULD NOT BE CONSIDERED THE FINAL WORD IN DETERMINING SPECIES LOCATIONS. ALTHOUGH IT PRESENTS OUR BEST CURRENT INFORMATION AVAILABLE, NEW SPECIES ARE REGULARLY BEING LISTED. FOR THOSE SPECIES ALREADY LISTED, COMPILING NEW SPECIES HABITAT INFORMATION IS A CONTINUING PROCESS. SPECIES POPULATIONS ARE OFTEN DYNAMIC AND, SUBSEQUENT TO LISTING, MAY BE DISCOVERED IN NEW LOCATIONS. MOREOVER, TRUE TO THEIR ENDANGERED OR THREATENED STATUS, THEY MAY BE EXTIRPATED FROM PREVIOUSLY OCCUPIED LOCATIONS.

THE OFFICE OF PESTICIDE PROGRAMS WILL MONITOR LISTING PROPOSALS AND RULE-MAKING NOTICES IN THE FEDERAL REGISTER AND MAKE OTHER CHANGES AS NEW INFORMATION BECOMES AVAILABLE. THE LIST WILL BE REPRINTED PERIODICALLY.



Recycled/Recyclable
Printed with Soy/Canola ink on paper that
contains at least 60% recycled fiber

STATE	COUNTY	OCCURRENCE	GROUP	TRIM(COMMONNAME)
IA	ADAIR	POSSIBLE	MAMMAL	BAT, INDIANA
IA	ADAIR	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	ADAIR	KNOWN	PLANT	MILKWEED, HEAD'S
IA	ADAIR	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	ADAMS	POSSIBLE	MAMMAL	BAT, INDIANA
IA	ADAMS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	ADAMS	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	ALLAMAKEE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	ALLAMAKEE	KNOWN	BIRD	EAGLE, BALD
IA	ALLAMAKEE	KNOWN	PLANT	MONKSHOOD, NORTHERN WILD
IA	ALLAMAKEE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	ALLAMAKEE	KNOWN	CLAM	FEARLY MUSSEL, HIGGINS' EYE
IA	APPANOOSE	KNOWN	MAMMAL	BAT, INDIANA
IA	APPANOOSE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	APPANOOSE	KNOWN	BIRD	EAGLE, BALD
IA	APPANOOSE	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	APPANOOSE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	ARLINGTON	POSSIBLE	MAMMAL	BAT, INDIANA
IA	ARLINGTON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	ARLINGTON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	BENTON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	BENTON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	BLACK HAWK	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	BLACK HAWK	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	BOONE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	BOONE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	BREMER	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	BREMER	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	BUCHANAN	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	BUCHANAN	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	BUENA VISTA	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	BUENA VISTA	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	BUTLER	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA	BUTLER	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CALHOUN	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	CALHOUN	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CARROLL	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	CARROLL	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CASS	POSSIBLE	MAMMAL	BAT, INDIANA
IA	CASS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	CASS	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CEDAR	POSSIBLE	MAMMAL	BAT, INDIANA
IA	CEDAR	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	CEDAR	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	CEDAR	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	Cerro Gordo	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	Cerro Gordo	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CHEROKEE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	CHEROKEE	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CHICKASAW	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	CHICKASAW	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CLARKE	POSSIBLE	MAMMAL	BAT, INDIANA
IA	CLARKE	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA	CLARKE	KNOWN	PLANT	MILKWEED, HEAD'S
IA	CLARKE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CLAY	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	CLAY	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	CLAYTON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	CLAYTON	KNOWN	BIRD	EAGLE, BALD
IA	CLAYTON	KNOWN	PLANT	MONKSHOOD, NORTHERN WILD
IA	CLAYTON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED

IA CLAYTON	KNOWN	SNAIL	SNAIL, IOWA PLEISTOCENE
IA CLINTON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA CLINTON	KNOWN	BIRD	EAGLE, BALD
IA CLINTON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA CLINTON	KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
IA CLINTON	KNOWN	SNAIL	SNAIL, IOWA PLEISTOCENE
IA CRAWFORD	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA CRAWFORD	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA DALLAS	POSSIBLE	MAMMAL	BAT, INDIANA
IA DALLAS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA DALLAS	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA DAVIS	KNOWN	MAMMAL	BAT, INDIANA
IA DAVIS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA DAVIS	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA DAVIS	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA DECATUR	KNOWN	MAMMAL	BAT, INDIANA
IA DECATUR	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA DECATUR	KNOWN	PLANT	MILKWEED, HEAD'S
IA DECATUR	KNOWN	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA DECATUR	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA DELAWARE	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA DELAWARE	KNOWN	PLANT	MONKSHOOD, NORTHERN WILD
IA DELAWARE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA DES MOINES	POSSIBLE	MAMMAL	BAT, INDIANA
IA DES MOINES	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA DES MOINES	KNOWN	BIRD	EAGLE, BALD
IA DES MOINES	KNOWN	CLAM	MUSSEL, FAT POCKETBOOK
IA DES MOINES	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA DES MOINES	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA DES MOINES	KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
IA DICKINSON	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA DICKINSON	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA DUBUQUE	KNOWN	MAMMAL	BAT, INDIANA
IA DUBUQUE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA DUBUQUE	KNOWN	BIRD	EAGLE, BALD
IA DUBUQUE	KNOWN	PLANT	MONKSHOOD, NORTHERN WILD
IA DUBUQUE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA DUBUQUE	KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
IA DUBUQUE	KNOWN	SNAIL	SNAIL, IOWA PLEISTOCENE
IA EMMET	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA EMMET	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA EYETTE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA EYETTE	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA EYETTE	KNOWN	SNAIL	SNAIL, IOWA PLEISTOCENE
IA FLOYD	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA FLOYD	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA FRANKLIN	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA FRANKLIN	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA FREMONT	POSSIBLE	MAMMAL	BAT, INDIANA
IA FREMONT	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA FREMONT	KNOWN	BIRD	EAGLE, BALD
IA FREMONT	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA FREMONT	KNOWN	FISH	STURGEON, FALLID
IA GREENE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA GREENE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA GRUNDY	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA GRUNDY	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA HATHRIE	POSSIBLE	MAMMAL	BAT, INDIANA
IA HATHRIE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA HATHRIE	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA HAMILTON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA HAMILTON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA HANCOCK	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA HANCOCK	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA HANCOCK	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE

IA	HARDIN	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	HARRISON	POSSIBLE	MAMMAL	BAT. INDIANA
IA	HARRISON	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	HARRISON	KNOWN	BIRD	EAGLE. BALD
IA	HARRISON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	HARRISON	KNOWN	FISH	STURGEON. FALLID
IA	HENRY	POSSIBLE	MAMMAL	BAT. INDIANA
IA	HENRY	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	HENRY	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	HENRY	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	HOWARD	KNOWN	PLANT	BUSH-CLOVER. PRAIRIE
IA	HOWARD	KNOWN	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	HUMBOLDT	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	HUMBOLDT	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	IDA	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	IDA	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	IOWA	POSSIBLE	MAMMAL	BAT. INDIANA
IA	IOWA	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	IOWA	KNOWN	BIRD	EAGLE. BALD
IA	IOWA	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	IOWA	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	JACKSON	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	JACKSON	KNOWN	BIRD	EAGLE. BALD
IA	JACKSON	KNOWN	PLANT	MONKSHOOD. NORTHERN WILD
IA	JACKSON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	JACKSON	KNOWN	CLAM	PEARLY MUSSEL. HIGGINS' EYE
IA	JACKSON	KNOWN	SNAIL	SNAIL. IOWA FLEISTOCENE
IA	KEFER	KNOWN	MAMMAL	BAT. INDIANA
IA	KASPER	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	KASPER	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	JEFFERSON	POSSIBLE	MAMMAL	BAT. INDIANA
IA	JEFFERSON	KNOWN	PLANT	BUSH-CLOVER. PRAIRIE
IA	JEFFERSON	KNOWN	BIRD	EAGLE. BALD
IA	JEFFERSON	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	JEFFERSON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	JOHNSON	POSSIBLE	MAMMAL	BAT. INDIANA
IA	JOHNSON	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	JOHNSON	KNOWN	BIRD	EAGLE. BALD
IA	JOHNSON	KNOWN	CLAM	MUSSEL. FAT POCKETBOOK
IA	JOHNSON	KNOWN	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	JOHNSON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	JONES	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	JONES	POSSIBLE	BIRD	EAGLE. BALD
IA	JONES	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	KEDAKA	POSSIBLE	MAMMAL	BAT. INDIANA
IA	KEOKUK	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	KEOKUK	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	KEOKUK	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	KOSSUTH	KNOWN	PLANT	BUSH-CLOVER. PRAIRIE
IA	KOSSUTH	KNOWN	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	LEE	POSSIBLE	MAMMAL	BAT. INDIANA
IA	LEE	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	LEE	KNOWN	BIRD	EAGLE. BALD
IA	LEE	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	LEE	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	LEE	POSSIBLE	CLAM	PEARLY MUSSEL. HIGGINS' EYE
IA	LINN	KNOWN	BIRD	EAGLE. BALD
IA	LINN	KNOWN	BIRD	FALCON. PEREGRINE
IA	LINN	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	LOUISA	KNOWN	MAMMAL	BAT. INDIANA
IA	LOUISA	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	LOUISA	KNOWN	BIRD	EAGLE. BALD
IA	LOUISA	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	LOUISA	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	LOUISA	KNOWN	CLAM	PEARLY MUSSEL. HIGGINS' EYE

IA	LUCAS	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA	LUCAS	POSSIBLE	PLANT	MILKWEED, HEAD'S
IA	LUCAS	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	LUCAS	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	LION	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	LION	POSSIBLE	FISH	STURGEON, FALLID
IA	MADISON	KNOWN	MAMMAL	BAT, INDIANA
IA	MADISON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MADISON	POSSIBLE	PLANT	MILKWEED, HEAD'S
IA	MADISON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	MAHASKA	POSSIBLE	MAMMAL	BAT, INDIANA
IA	MAHASKA	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MAHASKA	KNOWN	BIRD	EAGLE, BALD
IA	MAHASKA	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	MARION	KNOWN	MAMMAL	BAT, INDIANA
IA	MARION	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MARION	KNOWN	BIRD	EAGLE, BALD
IA	MARION	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	MARSHALL	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MARSHALL	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	HILLS	POSSIBLE	MAMMAL	BAT, INDIANA
IA	HILLS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	HILLS	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	HILLS	KNOWN	FISH	STURGEON, FALLID
IA	MITCHELL	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MITCHELL	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	MONONA	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MONONA	KNOWN	BIRD	EAGLE, BALD
IA	MONONA	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	MONONA	KNOWN	FISH	STURGEON, FALLID
IA	MONROE	KNOWN	MAMMAL	BAT, INDIANA
IA	MONROE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MONROE	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	MONROE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	MONTGOMERY	POSSIBLE	MAMMAL	BAT, INDIANA
IA	MONTGOMERY	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MONTGOMERY	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	MUSCATINE	POSSIBLE	MAMMAL	BAT, INDIANA
IA	MUSCATINE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	MUSCATINE	KNOWN	BIRD	EAGLE, BALD
IA	MUSCATINE	KNOWN	BIRD	FALCON, PEREGRINE
IA	MUSCATINE	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	MUSCATINE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	MUSCATINE	KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
IA	O'BRIEN	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	O'BRIEN	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	OSCEOLA	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA	OSCEOLA	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	PAGE	POSSIBLE	MAMMAL	BAT, INDIANA
IA	PAGE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	PAGE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	PALO ALTO	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	PALO ALTO	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	PLYMOUTH	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	PLYMOUTH	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	PLYMOUTH	POSSIBLE	FISH	STURGEON, FALLID
IA	POCAHONTAS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	POCAHONTAS	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	POLK	POSSIBLE	MAMMAL	BAT, INDIANA
IA	POLK	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	POLK	KNOWN	BIRD	EAGLE, BALD
IA	POLK	KNOWN	BIRD	FALCON, PEREGRINE
IA	POLK	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	POLK	POSSIBLE	BIRD	PLOVER, PIPING
IA	POTTAWATTAMIE	POSSIBLE	MAMMAL	BAT, INDIANA

IA	POTTAWATTAMIE	KNOWN	BIRD	EAGLE, BALD
IA	POTTAWATTAMIE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	POTTAWATTAMIE	KNOWN	BIRD	FLOWER, PIPING
IA	POTTAWATTAMIE	KNOWN	FISH	STURGEON, FALLID
IA	POTTAWATTAMIE	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
IA	POWESHIEK	POSSIBLE	MAMMAL	BAT, INDIANA
IA	POWESHIEK	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	POWESHIEK	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	PINGGOLD	KNOWN	MAMMAL	BAT, INDIANA
IA	PINGGOLD	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	PINGGOLD	POSSIBLE	PLANT	MILKWEED, HEAD'S
IA	PINGGOLD	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	PAC	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	PAC	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	SCOTT	POSSIBLE	MAMMAL	BAT, INDIANA
IA	SCOTT	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	SCOTT	KNOWN	BIRD	EAGLE, BALD
IA	SCOTT	KNOWN	BIRD	FALCON, PEREGRINE
IA	SCOTT	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	SCOTT	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	SCOTT	KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
IA	EHELBY	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	EHELBY	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	SIOUX	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	SIOUX	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	SIOUX	POSSIBLE	FISH	STURGEON, FALLID
IA	STORY	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA	STORY	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	TANA	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	TANA	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	TAYLOR	POSSIBLE	MAMMAL	BAT, INDIANA
IA	TAYLOR	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	TAYLOR	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	UNION	POSSIBLE	MAMMAL	BAT, INDIANA
IA	UNION	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	UNION	POSSIBLE	PLANT	MILKWEED, HEAD'S
IA	UNION	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	VAN BUREN	KNOWN	MAMMAL	BAT, INDIANA
IA	VAN BUREN	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	VAN BUREN	KNOWN	BIRD	EAGLE, BALD
IA	VAN BUREN	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	VAN BUREN	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	WAPELLO	KNOWN	MAMMAL	BAT, INDIANA
IA	WAPELLO	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	WAPELLO	KNOWN	BIRD	EAGLE, BALD
IA	WAPELLO	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	WAPELLO	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	WARREN	POSSIBLE	MAMMAL	BAT, INDIANA
IA	WARREN	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	WARREN	KNOWN	PLANT	MILKWEED, HEAD'S
IA	WARREN	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	WASHINGTON	KNOWN	MAMMAL	BAT, INDIANA
IA	WASHINGTON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	WASHINGTON	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	WASHINGTON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	WAYNE	POSSIBLE	MAMMAL	BAT, INDIANA
IA	WAYNE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	WAYNE	POSSIBLE	PLANT	MILKWEED, HEAD'S
IA	WAYNE	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	WAYNE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	WEBSTER	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	WEBSTER	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	WINNEBAGO	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	WINNEBAGO	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	WINNEBAGO	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE

12	UNWASHED	KNOWN	SNAIL	SNAIL, IOWA FLEISTOCENE
13	DODDUR	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
14	DODDUR	KNOWN	BIRD	EAGLE, BALD
15	DODDUR	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
16	DODDUR	KNOWN	BIRD	FLOWER, PIPING
17	DODDUR	KNOWN	FISH	STURGEON, PALLID
18	DODDUR	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
19	ORTH	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
20	ORTH	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
21	RISHT	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
22	RISHT	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED

STATE-	COUNTY+	-OCCURRENCE-	+GROUP+	-TRIMCOMMONNAME)
IA	AOTA	POSSIBLE	MAMMAL	BAT, INDIANA
IA	AOTIS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AOTIR	KNOWN	PLANT	MILKWEED, HEAD'S
IA	AOTIR	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AANS	POSSIBLE	MAMMAL	BAT, INDIANA
IA	AANS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AANS	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AELMAKEE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AELMAKEE	KNOWN	BIRD	EAGLE, BALD
IA	AELMAKEE	KNOWN	PLANT	MONKSHOOD, NORTHERN WILD
IA	AELMAKEE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AELMAKEE	KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
IA	AEPANDOSE	KNOWN	MAMMAL	BAT, INDIANA
IA	AEPANDOSE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AEPANDOSE	KNOWN	BIRD	EAGLE, BALD
IA	AEPANDOSE	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	AEPANDOSE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AEBUBON	POSSIBLE	MAMMAL	BAT, INDIANA
IA	AEBUBON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AEBURON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AENTON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AENTON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AENCT NAME	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AENCT NAME	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AEOONE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AEOONE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AEMER	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AEMER	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AUCHANAN	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AUCHANAN	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AUENA VISTA	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AUENA VISTA	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AUTLER	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA	AUTLER	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AALAHOU	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AALAHOU	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AAROLL	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AAROLL	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AASS	POSSIBLE	MAMMAL	BAT, INDIANA
IA	AASS	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AASS	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AEDAR	POSSIBLE	MAMMAL	BAT, INDIANA
IA	AEDAR	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AEDAR	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
IA	AEDAR	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AERRO BORDO	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AERRO BORDO	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AERODKEE	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AERODKEE	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	AATCHASAW	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	AATCHASAW	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	ACLARKE	POSSIBLE	MAMMAL	BAT, INDIANA
IA	ACLARKE	KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
IA	ACLARKE	KNOWN	PLANT	MILKWEED, HEAD'S
IA	ACLARKE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	ACLAY	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	ACLAY	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
IA	ACLAYTON	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
IA	ACLAYTON	KNOWN	BIRD	EAGLE, BALD
IA	ACLAYTON	KNOWN	PLANT	MONKSHOOD, NORTHERN WILD
IA	ACLAYTON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED

POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	BIRD	EAGLE, BALD
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
KNOWN	SNAIL	SNAIL, IOWA PLEISTOCENE
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT, INDIANA
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	MAMMAL	BAT, INDIANA
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	MAMMAL	BAT, INDIANA
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	PLANT	MILKWEED, HEAD'S
KNOWN	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	PLANT	MONKSHOOD, NORTHERN WILD
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT, INDIANA
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	BIRD	EAGLE, BALD
KNOWN	CLAM	MUSSEL, FAT POCKETBOOK
POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	MAMMAL	BAT, INDIANA
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	BIRD	EAGLE, BALD
KNOWN	PLANT	MONKSHOOD, NORTHERN WILD
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
KNOWN	SNAIL	SNAIL, IOWA PLEISTOCENE
KNOWN	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	SNAIL	SNAIL, IOWA PLEISTOCENE
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT, INDIANA
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	BIRD	EAGLE, BALD
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KNOWN	FISH	STURGEON, FALLID
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT, INDIANA
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE

1A	HARRISON	POSSIBLE	MAMMAL	BAT. INDIANA
1A	HARRISON	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	HARRISON	KNOWN	BIRD	EAGLE. BALD
1A	HARRISON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	HARRISON	KNOWN	FISH	STURGEON. FALLID
1A	HENRY	POSSIBLE	MAMMAL	BAT. INDIANA
1A	HENRY	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	HENRY	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
1A	HENRY	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	HOWARD	KNOWN	PLANT	BUSH-CLOVER. PRAIRIE
1A	HOWARD	KNOWN	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	HUMBOLT	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	HUMBOLT	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	IDA	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	IDA	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	IOWA	POSSIBLE	MAMMAL	BAT. INDIANA
1A	IOWA	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	IOWA	KNOWN	BIRD	EAGLE. BALD
1A	IOWA	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
1A	IOWA	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	JACKSON	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	JACKSON	KNOWN	BIRD	EAGLE. BALD
1A	JACKSON	KNOWN	PLANT	MONKSHOOD. NORTHERN WILD
1A	JACKSON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	JACKSON	KNOWN	CLAM	PEARLY MUSSEL. HIGGINS' EYE
1A	JACKSON	KNOWN	SNAIL	SNAIL. IOWA PLEISTOCENE
1A	JASPER	KNOWN	MAMMAL	BAT. INDIANA
1A	JASPER	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	JASPER	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	JEFFERSON	POSSIBLE	MAMMAL	BAT. INDIANA
1A	JEFFERSON	KNOWN	PLANT	BUSH-CLOVER. PRAIRIE
1A	JEFFERSON	KNOWN	BIRD	EAGLE. BALD
1A	JEFFERSON	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
1A	JEFFERSON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	JOHNSON	POSSIBLE	MAMMAL	BAT. INDIANA
1A	JOHNSON	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	JOHNSON	KNOWN	BIRD	EAGLE. BALD
1A	JOHNSON	KNOWN	CLAM	MUSSEL. FAT POCKETBOOK
1A	JOHNSON	KNOWN	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
1A	JOHNSON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	JONES	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	JONES	POSSIBLE	BIRD	EAGLE. BALD
1A	JONES	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	KEOKUK	POSSIBLE	MAMMAL	BAT. INDIANA
1A	KEOKUK	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	KEOKUK	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
1A	KEOKUK	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	KEOSAU	KNOWN	PLANT	BUSH-CLOVER. PRAIRIE
1A	KEOSAU	KNOWN	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	LEE	POSSIBLE	MAMMAL	BAT. INDIANA
1A	LEE	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	LEE	KNOWN	BIRD	EAGLE. BALD
1A	LEE	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
1A	LEE	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	LEE	POSSIBLE	CLAM	PEARLY MUSSEL. HIGGINS' EYE
1A	LENN	KNOWN	BIRD	EAGLE. BALD
1A	LENN	KNOWN	BIRD	FALCON. PEREGRINE
1A	LENN	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	LOUISA	KNOWN	MAMMAL	BAT. INDIANA
1A	LOUISA	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
1A	LOUISA	KNOWN	BIRD	EAGLE. BALD
1A	LOUISA	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
1A	LOUISA	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
1A	LOUISA	KNOWN	CLAM	PEARLY MUSSEL. HIGGINS' EYE

POSSIBLE	PLANT	MILKWEED. HEAD'S
POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	FISH	STURGEON. FALLID
KNOWN	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	MILKWEED. HEAD'S
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
KNOWN	BIRD	EAGLE. BALD
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
KNOWN	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
KNOWN	BIRD	EAGLE. BALD
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
KNOWN	FISH	STURGEON. FALLID
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
KNOWN	BIRD	EAGLE. BALD
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
KNOWN	FISH	STURGEON. FALLID
KNOWN	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
KNOWN	BIRD	EAGLE. BALD
KNOWN	BIRD	FALCON. PEREGRINE
POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
KNOWN	CLAM	PEARLY MUSSEL. HIGGINS' EYE
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
KNOWN	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	FISH	STURGEON. FALLID
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
KNOWN	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	MAMMAL	BAT. INDIANA
POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
KNOWN	BIRD	EAGLE. BALD
KNOWN	BIRD	FALCON. PEREGRINE
POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
POSSIBLE	BIRD	PLOVER. PIPING
POSSIBLE	MAMMAL	BAT. INDIANA

IA	POTTAWATTAMIE	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	POTTAWATTAMIE	KNOWN	BIRD	POWDER. FIFING
IA	POTTAWATTAMIE	KNOWN	FISH	STURGEON. FALLID
IA	POTTAWATTAMIE	KNOWN	BIRD	TERN. INTERIOR (POPULATION) LEAST
IA	POWESHIEK	POSSIBLE	MAMMAL	BAT. INDIANA
IA	POWESHIEK	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	POWESHIEK	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	PINGGOLD	KNOWN	MAMMAL	BAT. INDIANA
IA	PINGGOLD	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	PINGGOLD	POSSIBLE	PLANT	MILKWEED. HEAD'S
IA	PINGGOLD	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	PAC	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	PAC	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	SCOTT	POSSIBLE	MAMMAL	BAT. INDIANA
IA	SCOTT	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	SCOTT	KNOWN	BIRD	EAGLE. BALD
IA	SCOTT	KNOWN	BIRD	FALCON. PEREGRINE
IA	SCOTT	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	SCOTT	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	SCOTT	KNOWN	CLAM	PEARLY MUSSEL. HIGGINS' EYE
IA	SELB:	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	SELB:	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	SIDUA	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	SIDUA	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	SIDUA	POSSIBLE	FISH	STURGEON. FALLID
IA	STORY	KNOWN	PLANT	BUSH-CLOVER. PRAIRIE
IA	STORY	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	TANA	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	TANA	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	TAYLOR	POSSIBLE	MAMMAL	BAT. INDIANA
IA	TAYLOR	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	TAYLOR	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	UNION	POSSIBLE	MAMMAL	BAT. INDIANA
IA	UNION	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	UNION	POSSIBLE	PLANT	MILKWEED. HEAD'S
IA	UNION	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	AN BUREN	KNOWN	MAMMAL	BAT. INDIANA
IA	AN BUREN	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	AN BUREN	KNOWN	BIRD	EAGLE. BALD
IA	AN BUREN	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	AN BUREN	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	WAPELLO	KNOWN	MAMMAL	BAT. INDIANA
IA	WAPELLO	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	WAPELLO	KNOWN	BIRD	EAGLE. BALD
IA	WAPELLO	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	WAPELLO	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	WARREN	POSSIBLE	MAMMAL	BAT. INDIANA
IA	WARREN	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	WARREN	KNOWN	PLANT	MILKWEED. HEAD'S
IA	WARREN	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	WASHINGTON	KNOWN	MAMMAL	BAT. INDIANA
IA	WASHINGTON	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	WASHINGTON	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	WASHINGTON	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	WAYNE	POSSIBLE	MAMMAL	BAT. INDIANA
IA	WAYNE	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	WAYNE	POSSIBLE	PLANT	MILKWEED. HEAD'S
IA	WAYNE	POSSIBLE	PLANT	ORCHID. EASTERN PRAIRIE FRINGED
IA	WAYNE	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	WEBSTER	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	WEBSTER	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	WINNEBAGO	POSSIBLE	PLANT	BUSH-CLOVER. PRAIRIE
IA	WINNEBAGO	POSSIBLE	PLANT	ORCHID. WESTERN PRAIRIE FRINGED
IA	WINNEBAGO	KNOWN	PLANT	BUSH-CLOVER. PRAIRIE

2A	KNOWN	SNAIL	SNAIL, IONA PLEISTOCENE
	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
	KNOWN	BIRD	EAGLE, BALD
	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
	KNOWN	BIRD	FLOVER, PIPING
	KNOWN	FISH	STURGEON, PALLID
	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
	POSSIBLE	PLANT	BUSH-CLOVER, PRAIRIE
	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED

STATE	COUNTY	OCCURRENCE	GROUP	TRIM(COMMONNAME)
W	ALLEN	KNOWN	BIRD	EAGLE, BALD
W	ALLEN	POSSIBLE	BIRD	FALCON, PEREGRINE
W	ALLEN	KNOWN	FISH	MADTOM, NEOSHO
W	ALLEN	KNOWN	PLANT	MILKWEED, HEAD'S
W	ANDERSON	KNOWN	BIRD	EAGLE, BALD
W	ANDERSON	POSSIBLE	BIRD	FALCON, PEREGRINE
W	ANDERSON	KNOWN	PLANT	MILKWEED, HEAD'S
W	ANDERSON	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
W	ANDERSON	KNOWN	BIRD	EAGLE, BALD
W	ANDERSON	POSSIBLE	BIRD	FALCON, PEREGRINE
W	ANDERSON	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
W	ANDERSON	KNOWN	FISH	STURGEON, FALLID
W	BARBER	KNOWN	BIRD	CRANE, WHOOPING
W	BARBER	KNOWN	BIRD	EAGLE, BALD
W	BARBER	POSSIBLE	BIRD	FALCON, PEREGRINE
W	BARTON	KNOWN	BIRD	CRANE, WHOOPING
W	BARTON	KNOWN	BIRD	EAGLE, BALD
W	BARTON	POSSIBLE	BIRD	FALCON, PEREGRINE
W	BARTON	KNOWN	BIRD	PLOVER, PIPING
W	BARTON	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
W	BELMONT	POSSIBLE	MAMMAL	BAT, GRAY
W	BELMONT	KNOWN	BIRD	EAGLE, BALD
W	BELMONT	POSSIBLE	BIRD	FALCON, PEREGRINE
W	BELMONT	KNOWN	PLANT	MILKWEED, HEAD'S
W	BROWN	KNOWN	BIRD	EAGLE, BALD
W	BROWN	POSSIBLE	BIRD	FALCON, PEREGRINE
W	BUTLER	POSSIBLE	BIRD	CRANE, WHOOPING
W	BUTLER	KNOWN	BIRD	EAGLE, BALD
W	BUTLER	POSSIBLE	BIRD	FALCON, PEREGRINE
W	CHASE	KNOWN	BIRD	CRANE, WHOOPING
W	CHASE	KNOWN	BIRD	EAGLE, BALD
W	CHASE	POSSIBLE	BIRD	FALCON, PEREGRINE
W	CHASE	KNOWN	FISH	MADTOM, NEOSHO
W	CHAUTAUQUE	KNOWN	BIRD	EAGLE, BALD
W	CHAUTAUQUE	POSSIBLE	BIRD	FALCON, PEREGRINE
W	CHEROKEE	POSSIBLE	MAMMAL	BAT, GRAY
W	CHEROKEE	KNOWN	BIRD	EAGLE, BALD
W	CHEROKEE	POSSIBLE	BIRD	FALCON, PEREGRINE
W	CHEROKEE	KNOWN	FISH	MADTOM, NEOSHO
W	CHEYENNE	POSSIBLE	BIRD	CRANE, WHOOPING
W	CHEYENNE	KNOWN	BIRD	EAGLE, BALD
W	CHEYENNE	POSSIBLE	BIRD	FALCON, PEREGRINE
W	CHEYENNE	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
W	CLARK	KNOWN	BIRD	CRANE, WHOOPING
W	CLARK	KNOWN	BIRD	EAGLE, BALD
W	CLARK	POSSIBLE	BIRD	FALCON, PEREGRINE
W	CLARK	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
W	CLARK	KNOWN	BIRD	PLOVER, PIPING
W	CLARK	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
W	CLAY	POSSIBLE	BIRD	CRANE, WHOOPING
W	CLAY	KNOWN	BIRD	EAGLE, BALD
W	CLAY	POSSIBLE	BIRD	FALCON, PEREGRINE
W	CLOUD	KNOWN	BIRD	CRANE, WHOOPING
W	CLOUD	KNOWN	BIRD	EAGLE, BALD
W	CLOUD	POSSIBLE	BIRD	FALCON, PEREGRINE
W	COFFEY	KNOWN	BIRD	CRANE, WHOOPING
W	COFFEY	KNOWN	BIRD	EAGLE, BALD
W	COFFEY	POSSIBLE	BIRD	FALCON, PEREGRINE
W	COFFEY	KNOWN	FISH	MADTOM, NEOSHO
W	COFFEY	KNOWN	PLANT	MILKWEED, HEAD'S
W	COFFEY	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED

KS	COMANCHE	KNOWN	BIRD	EAGLE, BALD
KS	COMANCHE	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	COMANCHE	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
KS	COMANCHE	KNOWN	BIRD	PLOVER, PIPING
KS	COMANCHE	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
KS	COWLEY	KNOWN	BIRD	CRANE, WHOOPING
KS	COWLEY	KNOWN	BIRD	EAGLE, BALD
KS	COWLEY	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	COWLEY	POSSIBLE	BIRD	PLOVER, PIPING
KS	COWLEY	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
KS	CRAWFORD	KNOWN	MAMMAL	BAT, GRAY
KS	CRAWFORD	KNOWN	BIRD	EAGLE, BALD
KS	CRAWFORD	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	CRAWFORD	KNOWN	PLANT	MILKWEED, HEAD'S
KS	CRAWFORD	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KS	DECATUR	KNOWN	BIRD	CRANE, WHOOPING
KS	DECATUR	KNOWN	BIRD	EAGLE, BALD
KS	DECATUR	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	DECATUR	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
KS	DICKINSON	POSSIBLE	BIRD	CRANE, WHOOPING
KS	DICKINSON	KNOWN	BIRD	EAGLE, BALD
KS	DICKINSON	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	DOMPHAN	KNOWN	INSECT	BEETLE, AMERICAN BURYING
KS	DOMPHAN	KNOWN	BIRD	EAGLE, BALD
KS	DOMPHAN	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	DOMPHAN	KNOWN	FISH	STURGEON, FALLID
KS	DOUGLAS	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
KS	DOUGLAS	KNOWN	BIRD	CRANE, WHOOPING
KS	DOUGLAS	KNOWN	BIRD	EAGLE, BALD
KS	DOUGLAS	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	DOUGLAS	KNOWN	PLANT	MILKWEED, HEAD'S
KS	DOUGLAS	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KS	DOUGLAS	KNOWN	FISH	STURGEON, FALLID
KS	EDWARDS	KNOWN	BIRD	CRANE, WHOOPING
KS	EDWARDS	KNOWN	BIRD	EAGLE, BALD
KS	EDWARDS	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	EDWARDS	POSSIBLE	BIRD	PLOVER, PIPING
KS	EDWARDS	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
KS	ELA	KNOWN	BIRD	EAGLE, BALD
KS	ELA	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	ELLIS	KNOWN	BIRD	CRANE, WHOOPING
KS	ELLIS	KNOWN	BIRD	EAGLE, BALD
KS	ELLIS	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	ELLSWORTH	KNOWN	BIRD	CRANE, WHOOPING
KS	ELLSWORTH	KNOWN	BIRD	EAGLE, BALD
KS	ELLSWORTH	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	FINNEY	KNOWN	BIRD	CRANE, WHOOPING
KS	FINNEY	KNOWN	BIRD	EAGLE, BALD
KS	FINNEY	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	FINNEY	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
KS	FINNEY	POSSIBLE	BIRD	PLOVER, PIPING
KS	FINNEY	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
KS	FORD	KNOWN	BIRD	CRANE, WHOOPING
KS	FORD	KNOWN	BIRD	EAGLE, BALD
KS	FORD	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	FORD	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
KS	FORD	POSSIBLE	BIRD	PLOVER, PIPING
KS	FORD	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
KS	FRANKLIN	KNOWN	BIRD	EAGLE, BALD
KS	FRANKLIN	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	FRANKLIN	KNOWN	PLANT	MILKWEED, HEAD'S
KS	FRANKLIN	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
KS	GEARY	KNOWN	BIRD	EAGLE, BALD
KS	GEARY	POSSIBLE	BIRD	FALCON, PEREGRINE
KS	GRUE	KNOWN	BIRD	CRANE, WHOOPING

3	DOVE	POSSIBLE	BIRD	FALCON, PEREGRINE
13	DOVE	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	BRAMAN	KNOWN	BIRD	CRANE, WHOOPING
13	BRAMAN	KNOWN	BIRD	EAGLE, BALD
13	BRAMAN	POSSIBLE	BIRD	FALCON, PEREGRINE
13	BRAMAN	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	BRANT	KNOWN	BIRD	EAGLE, BALD
13	BRANT	POSSIBLE	BIRD	FALCON, PEREGRINE
13	BRANT	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	BRAY	KNOWN	BIRD	CRANE, WHOOPING
13	BRAY	KNOWN	BIRD	EAGLE, BALD
13	BRAY	POSSIBLE	BIRD	FALCON, PEREGRINE
13	BRAY	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	BRAY	POSSIBLE	BIRD	FLOWER, PIPING
13	BRAY	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
13	BREELEY	KNOWN	BIRD	EAGLE, BALD
13	BREELEY	POSSIBLE	BIRD	FALCON, PEREGRINE
13	BREELEY	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	BREENWOOD	KNOWN	BIRD	CRANE, WHOOPING
13	BREENWOOD	KNOWN	BIRD	EAGLE, BALD
13	BREENWOOD	POSSIBLE	BIRD	FALCON, PEREGRINE
13	HAMILTON	KNOWN	BIRD	EAGLE, BALD
13	HAMILTON	POSSIBLE	BIRD	FALCON, PEREGRINE
13	HAMILTON	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	HAMILTON	POSSIBLE	BIRD	FLOWER, PIPING
13	HAMILTON	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
13	HARPER	KNOWN	BIRD	CRANE, WHOOPING
13	HARPER	KNOWN	BIRD	EAGLE, BALD
13	HARPER	POSSIBLE	BIRD	FALCON, PEREGRINE
13	HARVEY	KNOWN	BIRD	CRANE, WHOOPING
13	HARVEY	KNOWN	BIRD	EAGLE, BALD
13	HARVEY	POSSIBLE	BIRD	FALCON, PEREGRINE
13	HASKELL	KNOWN	BIRD	CRANE, WHOOPING
13	HASKELL	KNOWN	BIRD	EAGLE, BALD
13	HASKELL	POSSIBLE	BIRD	FALCON, PEREGRINE
13	HASKELL	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	HODGEMAN	KNOWN	BIRD	CRANE, WHOOPING
13	HODGEMAN	KNOWN	BIRD	EAGLE, BALD
13	HODGEMAN	POSSIBLE	BIRD	FALCON, PEREGRINE
13	HODGEMAN	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	JACKSON	KNOWN	BIRD	EAGLE, BALD
13	JACKSON	POSSIBLE	BIRD	FALCON, PEREGRINE
13	JACKSON	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
13	JEFFERSON	KNOWN	BIRD	CRANE, WHOOPING
13	JEFFERSON	KNOWN	BIRD	EAGLE, BALD
13	JEFFERSON	POSSIBLE	BIRD	FALCON, PEREGRINE
13	JEFFERSON	KNOWN	PLANT	MILKWEED, HEAD'S
13	JEFFERSON	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
13	JEWELL	KNOWN	BIRD	CRANE, WHOOPING
13	JEWELL	KNOWN	BIRD	EAGLE, BALD
13	JEWELL	POSSIBLE	BIRD	FALCON, PEREGRINE
13	JOHNSON	KNOWN	BIRD	EAGLE, BALD
13	JOHNSON	POSSIBLE	BIRD	FALCON, PEREGRINE
13	JOHNSON	KNOWN	PLANT	MILKWEED, HEAD'S
13	JOHNSON	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
13	JOHNSON	POSSIBLE	FISH	STURGEON, FALLID
13	KEARNY	KNOWN	BIRD	CRANE, WHOOPING
13	KEARNY	KNOWN	BIRD	EAGLE, BALD
13	KEARNY	POSSIBLE	BIRD	FALCON, PEREGRINE
13	KEARNY	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
13	KEARNY	POSSIBLE	BIRD	FLOWER, PIPING
13	KEARNY	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
13	KINGMAN	KNOWN	BIRD	CRANE, WHOOPING
13	KINGMAN	KNOWN	BIRD	EAGLE, BALD
13	KINGMAN	POSSIBLE	BIRD	FALCON, PEREGRINE

1	JOHN	POSSIBLE	BIRD	FALCON, PEREGRINE
2	LALETTE	POSSIBLE	MAMMAL	BAT, GRAY
3	LALETTE	KNOWN	BIRD	EAGLE, BALD
4	LALETTE	POSSIBLE	BIRD	FALCON, PEREGRINE
5	LALETTE	KNOWN	FISH	MADTOM, NEOSHO
6	LANE	KNOWN	BIRD	CRANE, WHOOPIING
7	LANE	KNOWN	BIRD	EAGLE, BALD
8	LANE	POSSIBLE	BIRD	FALCON, PEREGRINE
9	LANE	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
10	LEAVENWORTH	KNOWN	BIRD	EAGLE, BALD
11	LEAVENWORTH	POSSIBLE	BIRD	FALCON, PEREGRINE
12	LEAVENWORTH	KNOWN	PLANT	MILKWEED, HEAD'S
13	LEAVENWORTH	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
14	LEAVENWORTH	KNOWN	FISH	STURGEON, FALLID
15	LINCOLN	KNOWN	BIRD	CRANE, WHOOPIING
16	LINCOLN	KNOWN	BIRD	EAGLE, BALD
17	LINCOLN	POSSIBLE	BIRD	FALCON, PEREGRINE
18	LINN	KNOWN	BIRD	EAGLE, BALD
19	LINN	POSSIBLE	BIRD	FALCON, PEREGRINE
20	LINN	KNOWN	PLANT	MILKWEED, HEAD'S
21	LISMAN	KNOWN	BIRD	CRANE, WHOOPIING
22	LISMAN	KNOWN	BIRD	EAGLE, BALD
23	LISMAN	POSSIBLE	BIRD	FALCON, PEREGRINE
24	LISMAN	POSSIBLE	MAMMAL	FERRRET, BLACK-FOOTED
25	LISMAN	KNOWN	BIRD	EAGLE, BALD
26	LISMAN	POSSIBLE	BIRD	FALCON, PEREGRINE
27	LISMAN	KNOWN	FISH	MADTOM, NEOSHO
28	LISMAN	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
29	LITCH	KNOWN	BIRD	CRANE, WHOOPIING
30	LITCH	KNOWN	BIRD	EAGLE, BALD
31	LITCH	POSSIBLE	BIRD	FALCON, PEREGRINE
32	LITCH	KNOWN	FISH	MADTOM, NEOSHO
33	LITCH	KNOWN	BIRD	CRANE, WHOOPIING
34	MARSHALL	KNOWN	BIRD	EAGLE, BALD
35	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
36	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
37	MARSHALL	KNOWN	BIRD	EAGLE, BALD
38	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
39	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
40	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
41	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
42	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
43	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
44	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
45	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
46	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
47	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
48	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
49	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
50	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
51	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
52	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
53	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
54	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
55	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
56	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
57	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
58	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
59	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
60	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
61	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
62	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
63	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
64	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
65	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
66	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
67	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
68	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
69	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
70	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
71	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
72	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
73	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
74	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
75	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
76	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
77	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
78	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
79	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
80	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
81	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
82	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
83	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
84	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
85	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
86	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
87	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
88	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
89	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
90	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGRINE
91	MARSHALL	KNOWN	BIRD	CRANE, WHOOPIING
92	MARSHALL	POSSIBLE	BIRD	FALCON, PEREGR

3	EGG	POSSIBLE	BIRD	FALCON, PEREGRINE
3	EGG	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
3	ORTON	KNOWN	BIRD	CRANE, WHOOPING
3	ORTON	KNOWN	BIRD	EAGLE, BALD
3	ORTON	POSSIBLE	BIRD	FALCON, PEREGRINE
3	ORTON	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
3	OSAGE	KNOWN	BIRD	CRANE, WHOOPING
3	OSAGE	KNOWN	BIRD	EAGLE, BALD
3	OSAGE	POSSIBLE	BIRD	FALCON, PEREGRINE
3	OSAGE	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
3	OSBORNE	KNOWN	BIRD	CRANE, WHOOPING
3	OSBORNE	KNOWN	BIRD	EAGLE, BALD
3	OSBORNE	POSSIBLE	BIRD	FALCON, PEREGRINE
3	OTTAWA	KNOWN	BIRD	CRANE, WHOOPING
3	OTTAWA	KNOWN	BIRD	EAGLE, BALD
3	OTTAWA	POSSIBLE	BIRD	FALCON, PEREGRINE
3	PAWNEE	KNOWN	BIRD	CRANE, WHOOPING
3	PAWNEE	KNOWN	BIRD	EAGLE, BALD
3	PAWNEE	POSSIBLE	BIRD	FALCON, PEREGRINE
3	PAWNEE	POSSIBLE	BIRD	FLOWER, PIPING
3	PAWNEE	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
3	PHILLIPS	KNOWN	BIRD	CRANE, WHOOPING
3	PHILLIPS	KNOWN	BIRD	EAGLE, BALD
3	PHILLIPS	POSSIBLE	BIRD	FALCON, PEREGRINE
3	PHILLIPS	KNOWN	BIRD	FLOWER, PIPING
3	PHILLIPS	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
3	POTTAWATOMIE	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
3	POTTAWATOMIE	KNOWN	BIRD	EAGLE, BALD
3	POTTAWATOMIE	POSSIBLE	BIRD	FALCON, PEREGRINE
3	POTTAWATOMIE	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
3	PRATT	KNOWN	BIRD	CRANE, WHOOPING
3	PRATT	KNOWN	BIRD	EAGLE, BALD
3	PRATT	POSSIBLE	BIRD	FALCON, PEREGRINE
3	RAWLINS	KNOWN	BIRD	CRANE, WHOOPING
3	RAWLINS	KNOWN	BIRD	EAGLE, BALD
3	RAWLINS	POSSIBLE	BIRD	FALCON, PEREGRINE
3	RAWLINS	KNOWN	MAMMAL	FERRET, BLACK-FOOTED
3	RENO	KNOWN	BIRD	CRANE, WHOOPING
3	RENO	KNOWN	BIRD	EAGLE, BALD
3	RENO	POSSIBLE	BIRD	FALCON, PEREGRINE
3	RENO	KNOWN	BIRD	FLOWER, PIPING
3	RENO	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
3	RENFELIC	KNOWN	BIRD	CRANE, WHOOPING
3	RENFELIC	KNOWN	BIRD	EAGLE, BALD
3	RENFELIC	POSSIBLE	BIRD	FALCON, PEREGRINE
3	RICE	KNOWN	BIRD	CRANE, WHOOPING
3	RICE	KNOWN	BIRD	EAGLE, BALD
3	RICE	POSSIBLE	BIRD	FALCON, PEREGRINE
3	RICE	KNOWN	BIRD	FLOWER, PIPING
3	RICE	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
3	RILEY	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
3	RILEY	KNOWN	BIRD	CRANE, WHOOPING
3	RILEY	KNOWN	BIRD	EAGLE, BALD
3	RILEY	POSSIBLE	BIRD	FALCON, PEREGRINE
3	RILEY	POSSIBLE	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
3	ROOKS	KNOWN	BIRD	CRANE, WHOOPING
3	ROOKS	KNOWN	BIRD	EAGLE, BALD
3	ROOKS	POSSIBLE	BIRD	FALCON, PEREGRINE
3	RUSH	KNOWN	BIRD	CRANE, WHOOPING
3	RUSH	KNOWN	BIRD	EAGLE, BALD
3	RUSH	POSSIBLE	BIRD	FALCON, PEREGRINE
3	RUSSELL	KNOWN	BIRD	CRANE, WHOOPING
3	RUSSELL	KNOWN	BIRD	EAGLE, BALD
3	RUSSELL	POSSIBLE	BIRD	FALCON, PEREGRINE
3	SAVINE	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING

[illegible]

6	WICHITA	POSSIBLE	BIRD	FALCON. PEREGRINE
6	WICHITA	POSSIBLE	MAMMAL	FERRER. BLACK-FOOTED
6	WILSON	KNOWN	BIRD	EAGLE. BALD
6	WILSON	POSSIBLE	BIRD	FALCON. PEREGRINE
6	WILSON	KNOWN	BIRD	EAGLE. BALD
6	WILSON	POSSIBLE	BIRD	FALCON. PEREGRINE
6	WILSON	KNOWN	FISH	WATSON. MESSHO
6	WILSON	KNOWN	BIRD	EAGLE. BALD
6	WILSON	POSSIBLE	BIRD	FALCON. PEREGRINE
6	WILSON	KNOWN	FISH	STURGEON. FALLO

STATE+	COUNTY+	OCCURRENCE+	GROUP+	TRIM(COMMONNAME)
MO	ADAMS	KNOWN	FISH	STURGEON, PALLID
MO	ADAMSON	KNOWN	BIRD	EAGLE, BALD
MO	ADAMSON	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
MO	ADAMSON	KNOWN	FISH	STURGEON, PALLID
MO	ADAMS	KNOWN	MAMMAL	BAT, GRAY
MO	ADAMS	POSSIBLE	MAMMAL	BAT, INDIANA
MO	ADAMS	KNOWN	FISH	CAVEFISH, OZARK
MO	ADAMS	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
MO	ADAMS	KNOWN	PLANT	MILKWEED, HEAD'S
MO	BENTON	KNOWN	MAMMAL	BAT, GRAY
MO	BENTON	POSSIBLE	FISH	CAVEFISH, OZARK
MO	BENTON	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
MO	BENTON	KNOWN	FISH	DARTER, NIANGUA
MO	BENTON	KNOWN	PLANT	MILKWEED, HEAD'S
MO	BOLLINGER	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
MO	BOLLINGER	POSSIBLE	CLAM	PEARLY MUSSEL, CURTIS
MO	BONE	KNOWN	MAMMAL	BAT, GRAY
MO	BONE	KNOWN	MAMMAL	BAT, INDIANA
MO	BONE	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
MO	BONE	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
MO	BONE	KNOWN	FISH	STURGEON, PALLID
MO	BUCHANAN	KNOWN	BIRD	POLOVER, PIPING
MO	BUCHANAN	KNOWN	FISH	STURGEON, PALLID
MO	BUTLER	KNOWN	CLAM	PEARLY MUSSEL, PINK MUCKET
MO	BUTLER	KNOWN	PLANT	PONDBERRY
MO	CALLAWAY	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
MO	CALLAWAY	KNOWN	BIRD	EAGLE, BALD
MO	CALLAWAY	POSSIBLE	FISH	STURGEON, PALLID
MO	CARDEN	KNOWN	MAMMAL	BAT, GRAY
MO	CARDEN	KNOWN	MAMMAL	BAT, INDIANA
MO	CARDEN	KNOWN	FISH	DARTER, NIANGUA
MO	CAPE GIRARDEAU	POSSIBLE	PLANT	ASTER, DECURRENT FALSE
MO	CAPE GIRARDEAU	KNOWN	BIRD	EAGLE, BALD
MO	CAPE GIRARDEAU	POSSIBLE	FISH	STURGEON, PALLID
MO	CARROLL	POSSIBLE	FISH	STURGEON, PALLID
MO	CARTER	KNOWN	MAMMAL	BAT, GRAY
MO	CARTER	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
MO	CARTER	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
MO	CASS	KNOWN	PLANT	MILKWEED, HEAD'S
MO	CEGAR	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
MO	CEGAR	KNOWN	FISH	DARTER, NIANGUA
MO	CEGAR	KNOWN	PLANT	GEOCARPON MINIMUM
MO	CEGAR	KNOWN	PLANT	MILKWEED, HEAD'S
MO	CEGAR	KNOWN	CLAM	PEARLY MUSSEL, PINK MUCKET
MO	CHARITON	KNOWN	MAMMAL	BAT, INDIANA
MO	CHARITON	KNOWN	BIRD	EAGLE, BALD
MO	CHARITON	POSSIBLE	FISH	STURGEON, PALLID
MO	CHRISTIAN	KNOWN	MAMMAL	BAT, GRAY
MO	CHRISTIAN	POSSIBLE	MAMMAL	BAT, INDIANA
MO	CHRISTIAN	KNOWN	PLANT	BLADDERPOD, MISSOURI
MO	CHRISTIAN	POSSIBLE	FISH	CAVEFISH, OZARK
MO	CHRISTIAN	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
MO	CLARK	KNOWN	BIRD	EAGLE, BALD
MO	CLARK	KNOWN	CLAM	MUSSEL, FAT POCKETBOOK
MO	CLAY	KNOWN	BIRD	FALCON, PEREGRINE
MO	CLAY	KNOWN	FISH	STURGEON, PALLID
MO	CLINTON	KNOWN	MAMMAL	BAT, INDIANA
MO	COLE	KNOWN	MAMMAL	BAT, GRAY
MO	COLE	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
MO	COLE	KNOWN	CLAM	PEARLY MUSSEL, PINK MUCKET

NO	LAMM	KNOWN	MAMMAL	BAT, INDIANA
NO	LIVINGSTON	KNOWN	BIRD	EAGLE, BALD
NO	MACON	KNOWN	MAMMAL	BAT, INDIANA
NO	MACON	KNOWN	MAMMAL	BAT, INDIANA
NO	MARIEE	POSSIBLE	FISH	STURGEON, PALLID
NO	MASON	KNOWN	MAMMAL	BAT, INDIANA
NO	MARLE	KNOWN	CLAM	MUSSEL, FAT POCKETBOOK
NO	MARLE	KNOWN	CLAM	PEARLY MUSSEL, HIGGINS' EYE
NO	MARLE	KNOWN	MAMMAL	BAT, GRAY
NO	MARLE	KNOWN	MAMMAL	BAT, INDIANA
NO	MILLER	KNOWN	MAMMAL	BAT, GRAY
NO	MILLER	KNOWN	FISH	DARTER, NIANGUA
NO	MILLER	KNOWN	BIRD	EAGLE, BALD
NO	MILLER	KNOWN	CLAM	PEARLY MUSSEL, PINK MUCKET
NO	MISSISSIPPI	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
NO	MISSISSIPPI	KNOWN	FISH	STURGEON, PALLID
NO	MISSISSIPPI	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NO	MONITEAU	POSSIBLE	FISH	STURGEON, PALLID
NO	MONROE	KNOWN	MAMMAL	BAT, INDIANA
NO	MONTGOMERY	POSSIBLE	FISH	STURGEON, PALLID
NO	MORGAN	KNOWN	MAMMAL	BAT, GRAY
NO	NEW MADRID	KNOWN	BIRD	EAGLE, BALD
NO	NEW MADRID	POSSIBLE	FISH	STURGEON, PALLID
NO	NEW MADRID	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NO	NEWTON	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
NO	NEWTON	KNOWN	FISH	CAVEFISH, OZARK
NO	NODAWAY	KNOWN	MAMMAL	BAT, INDIANA
NO	OREGON	KNOWN	MAMMAL	BAT, GRAY
NO	OREGON	KNOWN	MAMMAL	BAT, INDIANA
NO	OSAGE	POSSIBLE	MAMMAL	BAT, GRAY
NO	OSAGE	KNOWN	CLAM	PEARLY MUSSEL, PINK MUCKET
NO	OSAGE	POSSIBLE	FISH	STURGEON, PALLID
NO	OZARK	KNOWN	MAMMAL	BAT, GRAY
NO	OZARK	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
NO	PEMISCOT	POSSIBLE	FISH	STURGEON, PALLID
NO	PEMISCOT	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NO	PERRY	KNOWN	FISH	STURGEON, PALLID
NO	PETTIS	KNOWN	PLANT	MILKWEED, HEAD'S
NO	PHELPS	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
NO	PHELPS	KNOWN	BIRD	EAGLE, BALD
NO	PIKE	KNOWN	PLANT	ASTER, DECURRENT FALSE
NO	PIKE	POSSIBLE	MAMMAL	BAT, GRAY
NO	PIKE	KNOWN	MAMMAL	BAT, INDIANA
NO	PIKE	KNOWN	BIRD	EAGLE, BALD
NO	PIKE	KNOWN	CLAM	MUSSEL, FAT POCKETBOOK
NO	PLATTE	POSSIBLE	FISH	STURGEON, PALLID
NO	POLK	KNOWN	FISH	DARTER, NIANGUA
NO	POLK	KNOWN	PLANT	MILKWEED, HEAD'S
NO	POLK	KNOWN	BIRD	PLOVER, PIPING
NO	PULASKI	KNOWN	MAMMAL	BAT, GRAY
NO	PULASKI	KNOWN	MAMMAL	BAT, INDIANA
NO	PULASKI	KNOWN	BIRD	EAGLE, BALD
NO	RALLS	KNOWN	MAMMAL	BAT, GRAY
NO	RALLS	KNOWN	CLAM	MUSSEL, FAT POCKETBOOK
NO	RALLS	POSSIBLE	PLANT	ORCHID, EASTERN PRAIRIE FRINGED
NO	RAY	POSSIBLE	FISH	STURGEON, PALLID
NO	REYNOLDS	KNOWN	MAMMAL	BAT, GRAY
NO	REYNOLDS	KNOWN	PLANT	MILKWEED, HEAD'S
NO	RIPLEY	KNOWN	CLAM	PEARLY MUSSEL, CURTIS'
NO	RIPLEY	KNOWN	CLAM	PEARLY MUSSEL, PINK MUCKET
NO	RIPLEY	KNOWN	PLANT	PONDBERRY
NO	SALINE	POSSIBLE	FISH	STURGEON, PALLID
NO	SCOTLAND	KNOWN	MAMMAL	BAT, INDIANA
NO	SHANNON	KNOWN	MAMMAL	BAT, GRAY
NO	SHANNON	KNOWN	MAMMAL	BAT, INDIANA
NO	SHANNON	KNOWN	PLANT	ASTER, DECURRENT FALSE

NO	ST. CHARLES	KNOWN	BIRD	FALCON, PEREGRINE
NO	ST. CHARLES	POSSIBLE	FISH	STURGEON, PALLID
NO	ST. CLAIR	KNOWN	MAMMAL	BAT, GRAY
NO	ST. CLAIR	KNOWN	FISH	DARTER, NIANGUA
NO	ST. CLAIR	KNOWN	BIRD	EAGLE, BALD
NO	ST. CLAIR	KNOWN	PLANT	GEOCARPON MINIMUM
NO	ST. CLAIR	KNOWN	PLANT	MILKWEED, HEAD'S
NO	ST. GENEVIEVE	KNOWN	FISH	STURGEON, PALLID
NO	ST. LOUIS	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
NO	ST. LOUIS	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
NO	ST. LOUIS	KNOWN	BIRD	FALCON, PEREGRINE
NO	ST. LOUIS	KNOWN	CLAM	PEARLY MUSSEL, PINK MUCKET
NO	ST. LOUIS	KNOWN	FISH	STURGEON, PALLID
NO	STODDARD	KNOWN	BIRD	EAGLE, BALD
NO	STONE	KNOWN	MAMMAL	BAT, GRAY
NO	STONE	POSSIBLE	MAMMAL	BAT, INDIANA
NO	STONE	KNOWN	FISH	CAVEFISH, DARK
NO	SULLIVAN	KNOWN	MAMMAL	BAT, INDIANA
NO	TANEY	KNOWN	MAMMAL	BAT, GRAY
NO	TANEY	KNOWN	MAMMAL	BAT, INDIANA
NO	TANEY	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
NO	TANEY	KNOWN	BIRD	EAGLE, BALD
NO	TEXAS	KNOWN	MAMMAL	BAT, GRAY
NO	TEXAS	KNOWN	MAMMAL	BAT, INDIANA
NO	TEXAS	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
NO	TERNGR	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
NO	TERNGR	KNOWN	PLANT	MILKWEED, HEAD'S
NO	WARREN	POSSIBLE	FISH	STURGEON, PALLID
NO	WASHINGTON	KNOWN	MAMMAL	BAT, GRAY
NO	WASHINGTON	KNOWN	MAMMAL	BAT, INDIANA
NO	WAYNE	POSSIBLE	INSECT	BEETLE, AMERICAN BURYING
NO	WAYNE	KNOWN	PLANT	CLOVER, RUNNING BUFFALO
NO	WAYNE	KNOWN	BIRD	EAGLE, BALD
NO	WAYNE	KNOWN	CLAM	PEARLY MUSSEL, CURTIS'
NO	WAYNE	KNOWN	CLAM	PEARLY MUSSEL, PINK MUCKET
NO	WEBSTER	KNOWN	FISH	DARTER, NIANGUA
NO	WRIGHT	KNOWN	MAMMAL	BAT, GRAY
NO	WRIGHT	KNOWN	MAMMAL	BAT, INDIANA
NO	WRIGHT	KNOWN	BIRD	EAGLE, BALD

STATE+*	COUNTY+*	OCCURRENCE+*	GROUP+*	TRIM(COMMONNAME)
NE	ADAMS	KNOWN	BIRD	CRANE, WHOOPING
NE	ADAMS	KNOWN	BIRD	EAGLE, BALD
NE	ADAMS	KNOWN	MAMMAL	FERRET, BLACK-FOOTED
NE	ARTHUR	KNOWN	BIRD	CRANE, WHOOPING
NE	ARTHUR	KNOWN	BIRD	EAGLE, BALD
NE	BLAINE	KNOWN	BIRD	CRANE, WHOOPING
NE	BLAINE	KNOWN	BIRD	EAGLE, BALD
NE	BOX BUTTE	KNOWN	BIRD	CRANE, WHOOPING
NE	BOX BUTTE	KNOWN	BIRD	EAGLE, BALD
NE	BOX BUTTE	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	BOX BUTTE	KNOWN	PLANT	PENSTEMON, BLOWOUT
NE	BOYD	KNOWN	BIRD	CRANE, WHOOPING
NE	BOYD	KNOWN	BIRD	EAGLE, BALD
NE	BOYD	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	BOYD	KNOWN	BIRD	PLOVER, PIPING
NE	BOYD	KNOWN	FISH	STURGEON, FALLID
NE	BOYD	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	BROWN	KNOWN	BIRD	CRANE, WHOOPING
NE	BROWN	KNOWN	BIRD	EAGLE, BALD
NE	BROWN	KNOWN	BIRD	PLOVER, PIPING
NE	BROWN	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	BUFFALO	KNOWN	BIRD	CRANE, WHOOPING
NE	BUFFALO	KNOWN	BIRD	EAGLE, BALD
NE	BUFFALO	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	BUFFALO	KNOWN	BIRD	PLOVER, PIPING
NE	BUFFALO	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	BURT	KNOWN	BIRD	EAGLE, BALD
NE	BURT	KNOWN	FISH	STURGEON, FALLID
NE	BUTLER	KNOWN	BIRD	EAGLE, BALD
NE	BUTLER	KNOWN	BIRD	PLOVER, PIPING
NE	BUTLER	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	CASS	KNOWN	BIRD	EAGLE, BALD
NE	CASS	KNOWN	BIRD	PLOVER, PIPING
NE	CASS	KNOWN	FISH	STURGEON, FALLID
NE	CASS	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	CEDAR	KNOWN	BIRD	EAGLE, BALD
NE	CEDAR	KNOWN	BIRD	PLOVER, PIPING
NE	CEDAR	KNOWN	FISH	STURGEON, FALLID
NE	CEDAR	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	CHASE	KNOWN	BIRD	EAGLE, BALD
NE	CHERRY	KNOWN	BIRD	CRANE, WHOOPING
NE	CHERRY	KNOWN	BIRD	EAGLE, BALD
NE	CHERRY	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
NE	CHERRY	KNOWN	PLANT	PENSTEMON, BLOWOUT
NE	CHERRY	POSSIBLE	BIRD	PLOVER, PIPING
NE	CLAY	KNOWN	BIRD	CRANE, WHOOPING
NE	CLAY	KNOWN	BIRD	EAGLE, BALD
NE	COLFAX	KNOWN	BIRD	EAGLE, BALD
NE	COLFAX	KNOWN	BIRD	PLOVER, PIPING
NE	COLFAX	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	CUMING	KNOWN	BIRD	PLOVER, PIPING
NE	CUMING	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	DUSTER	KNOWN	BIRD	CRANE, WHOOPING
NE	DUSTER	KNOWN	BIRD	EAGLE, BALD
NE	DUSTER	KNOWN	BIRD	PLOVER, PIPING
NE	DUSTER	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	DAKOTA	KNOWN	FISH	STURGEON, FALLID
NE	DAMES	KNOWN	BIRD	EAGLE, BALD
NE	DAWSON	KNOWN	BIRD	CRANE, WHOOPING
NE	DAWSON	KNOWN	BIRD	EAGLE, BALD

NE	BEUEL	KNOWN	BIRD	CRANE, WHOOPING
NE	BEUEL	KNOWN	BIRD	EAGLE, BALD
NE	BEUEL	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	DIXON	KNOWN	BIRD	PLOVER, PIPING
NE	DIXON	KNOWN	FISH	STURGEON, FALLID
NE	DIXON	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	DODGE	KNOWN	BIRD	PLOVER, PIPING
NE	DODGE	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	DOUGLAS	KNOWN	BIRD	EAGLE, BALD
NE	DOUGLAS	KNOWN	BIRD	PLOVER, PIPING
NE	DOUGLAS	KNOWN	FISH	STURGEON, FALLID
NE	DOUGLAS	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	DUNDY	KNOWN	BIRD	CRANE, WHOOPING
NE	DUNDY	KNOWN	BIRD	EAGLE, BALD
NE	FRANKLIN	KNOWN	BIRD	CRANE, WHOOPING
NE	FRANKLIN	KNOWN	BIRD	EAGLE, BALD
NE	FRONTIER	KNOWN	BIRD	CRANE, WHOOPING
NE	FRONTIER	KNOWN	BIRD	EAGLE, BALD
NE	FURNAS	KNOWN	BIRD	CRANE, WHOOPING
NE	FURNAS	KNOWN	BIRD	EAGLE, BALD
NE	GAGE	KNOWN	BIRD	EAGLE, BALD
NE	GARDEN	KNOWN	BIRD	CRANE, WHOOPING
NE	GARDEN	KNOWN	BIRD	EAGLE, BALD
NE	GARDEN	KNOWN	PLANT	PENSTEMON, BLOWOUT
NE	GARFIELD	KNOWN	BIRD	CRANE, WHOOPING
NE	GOSPER	KNOWN	BIRD	CRANE, WHOOPING
NE	GOSPER	KNOWN	BIRD	EAGLE, BALD
NE	GOSPER	KNOWN	BIRD	PLOVER, PIPING
NE	GOSPER	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	GRANT	KNOWN	BIRD	CRANE, WHOOPING
NE	GREELEY	KNOWN	BIRD	CRANE, WHOOPING
NE	GREELEY	KNOWN	BIRD	EAGLE, BALD
NE	HALL	KNOWN	BIRD	CRANE, WHOOPING
NE	HALL	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
NE	HALL	KNOWN	BIRD	PLOVER, PIPING
NE	HALL	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	HAMILTON	KNOWN	BIRD	PLOVER, PIPING
NE	HAMILTON	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	HARLAN	KNOWN	BIRD	CRANE, WHOOPING
NE	HARLAN	KNOWN	BIRD	EAGLE, BALD
NE	HAYES	KNOWN	BIRD	CRANE, WHOOPING
NE	HITCHCOCK	KNOWN	BIRD	CRANE, WHOOPING
NE	HITCHCOCK	KNOWN	BIRD	EAGLE, BALD
NE	HOLT	KNOWN	BIRD	CRANE, WHOOPING
NE	HOLT	KNOWN	BIRD	EAGLE, BALD
NE	HOLT	KNOWN	BIRD	PLOVER, PIPING
NE	HOLT	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	HOOVER	KNOWN	BIRD	CRANE, WHOOPING
NE	HOOVER	KNOWN	PLANT	PENSTEMON, BLOWOUT
NE	HOWARD	KNOWN	BIRD	CRANE, WHOOPING
NE	HOWARD	KNOWN	BIRD	EAGLE, BALD
NE	HOWARD	KNOWN	BIRD	PLOVER, PIPING
NE	HOWARD	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	KEARNEY	KNOWN	BIRD	CRANE, WHOOPING
NE	KEARNEY	KNOWN	BIRD	EAGLE, BALD
NE	KEARNEY	KNOWN	BIRD	PLOVER, PIPING
NE	KEARNEY	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	KEITH	KNOWN	BIRD	EAGLE, BALD
NE	KEITH	KNOWN	BIRD	PLOVER, PIPING
NE	KEITH	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	KEYA PAHA	KNOWN	BIRD	CRANE, WHOOPING
NE	KEYA PAHA	KNOWN	BIRD	EAGLE, BALD
NE	KEYA PAHA	KNOWN	BIRD	PLOVER, PIPING
NE	KEYA PAHA	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	KEYA PAHA	KNOWN	BIRD	EAGLE, BALD

NE	INOX	KNOWN	FISH	STURGEON, PALLID
NE	INOX	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	LANCASTER	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
NE	LINCOLN	KNOWN	BIRD	CRANE, WHOOPING
NE	LINCOLN	KNOWN	BIRD	EAGLE, BALD
NE	LINCOLN	POSSIBLE	BIRD	PLOVER, PIPING
NE	LINCOLN	POSSIBLE	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	LOGAN	KNOWN	BIRD	CRANE, WHOOPING
NE	LOUP	KNOWN	BIRD	CRANE, WHOOPING
NE	LOUP	KNOWN	BIRD	EAGLE, BALD
NE	MADISON	KNOWN	BIRD	PLOVER, PIPING
NE	MADISON	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	MCPHEARSON	KNOWN	BIRD	CRANE, WHOOPING
NE	MERRICK	KNOWN	BIRD	PLOVER, PIPING
NE	MERRICK	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	MORRILL	KNOWN	BIRD	EAGLE, BALD
NE	MORRILL	KNOWN	PLANT	PENSTEMON, BLOWOUT
NE	NANCE	KNOWN	BIRD	EAGLE, BALD
NE	NANCE	KNOWN	BIRD	PLOVER, PIPING
NE	NANCE	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	NEMAHA	KNOWN	FISH	STURGEON, PALLID
NE	NUCKOLLS	KNOWN	BIRD	CRANE, WHOOPING
NE	NUCKOLLS	KNOWN	BIRD	EAGLE, BALD
NE	OTOE	KNOWN	BIRD	EAGLE, BALD
NE	OTOE	KNOWN	FISH	STURGEON, PALLID
NE	PERKINS	KNOWN	BIRD	CRANE, WHOOPING
NE	PERKINS	POSSIBLE	BIRD	EAGLE, BALD
NE	PHELPS	KNOWN	BIRD	CRANE, WHOOPING
NE	PHELPS	KNOWN	BIRD	EAGLE, BALD
NE	PHELPS	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	PHELPS	KNOWN	BIRD	PLOVER, PIPING
NE	PHELPS	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	PLATTE	KNOWN	BIRD	EAGLE, BALD
NE	PLATTE	KNOWN	BIRD	PLOVER, PIPING
NE	PLATTE	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	FOLK	KNOWN	BIRD	EAGLE, BALD
NE	FOLK	KNOWN	BIRD	PLOVER, PIPING
NE	FOLK	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	FED WILLOW	KNOWN	BIRD	CRANE, WHOOPING
NE	FED WILLOW	KNOWN	BIRD	EAGLE, BALD
NE	FED WILLOW	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	RICHARDSON	KNOWN	BIRD	EAGLE, BALD
NE	RICHARDSON	KNOWN	FISH	STURGEON, PALLID
NE	ROCK	KNOWN	BIRD	CRANE, WHOOPING
NE	ROCK	KNOWN	BIRD	EAGLE, BALD
NE	ROCK	KNOWN	BIRD	PLOVER, PIPING
NE	ROCK	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	SARPY	KNOWN	BIRD	EAGLE, BALD
NE	SARPY	KNOWN	BIRD	PLOVER, PIPING
NE	SARPY	KNOWN	FISH	STURGEON, PALLID
NE	SARPY	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	SAUNDERS	KNOWN	BIRD	EAGLE, BALD
NE	SAUNDERS	KNOWN	BIRD	PLOVER, PIPING
NE	SAUNDERS	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	SCOTTS BLUFF	KNOWN	BIRD	CRANE, WHOOPING
NE	SCOTTS BLUFF	KNOWN	BIRD	EAGLE, BALD
NE	SCOTTS BLUFF	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	SEWARD	KNOWN	BIRD	EAGLE, BALD
NE	SEWARD	KNOWN	PLANT	ORCHID, WESTERN PRAIRIE FRINGED
NE	SHERIDAN	KNOWN	BIRD	CRANE, WHOOPING
NE	SHERIDAN	KNOWN	BIRD	EAGLE, BALD
NE	SHERIDAN	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	SHERIDAN	KNOWN	PLANT	PENSTEMON, BLOWOUT
NE	SHERMAN	KNOWN	BIRD	CRANE, WHOOPING
NE	SHERMAN	KNOWN	BIRD	EAGLE, BALD

NE	SHERMAN	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	SHERMAN	KNOWN	BIRD	PLOVER, PIPING
NE	SHERMAN	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	SIOUX	KNOWN	BIRD	CRANE, WHOOPING
NE	SIOUX	KNOWN	BIRD	EAGLE, BALD
NE	SIOUX	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	STANTON	KNOWN	BIRD	EAGLE, BALD
NE	STANTON	KNOWN	BIRD	PLOVER, PIPING
NE	STANTON	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	THOMAS	KNOWN	INSECT	BEETLE, AMERICAN BURYING
NE	THOMAS	KNOWN	BIRD	CRANE, WHOOPING
NE	THOMAS	KNOWN	BIRD	EAGLE, BALD
NE	THURSTON	KNOWN	BIRD	EAGLE, BALD
NE	THURSTON	KNOWN	FISH	STURGEON, PALLID
NE	VALLEY	KNOWN	BIRD	CRANE, WHOOPING
NE	VALLEY	KNOWN	BIRD	EAGLE, BALD
NE	VALLEY	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	VALLEY	KNOWN	BIRD	PLOVER, PIPING
NE	VALLEY	KNOWN	BIRD	TERN, INTERIOR (POPULATION) LEAST
NE	WASHINGTON	KNOWN	BIRD	EAGLE, BALD
NE	WASHINGTON	KNOWN	FISH	STURGEON, PALLID
NE	WEBSTER	KNOWN	BIRD	CRANE, WHOOPING
NE	WEBSTER	KNOWN	BIRD	EAGLE, BALD
NE	WEBSTER	POSSIBLE	MAMMAL	FERRET, BLACK-FOOTED
NE	WHEELER	KNOWN	BIRD	CRANE, WHOOPING
NE	WHEELER	KNOWN	BIRD	EAGLE, BALD

**REGION VII THREATENED AND ENDANGERED
ANIMAL SPECIES
BY STATE AND COUNTY OF OCCURRENCE**

THREATENED AND ENDANGERED
ANIMAL SPECIES OF IOWA BY COUNTY

SCIENTIFIC NAME	COMMON NAME	STATUS CODE	WETLAND TYPES	SUBSTRATE	ENDCAUSE
** COUNTY: ALLAMAKEE					
ACCIPENSER FULVESCENS (RAFINESQUE)	LAKE STURGEON	E1,EM,1M	R2UB,R2OW, L1UB,R2RB	2,3,6,7	3,4,5
APHREDODERUS SAYANUS	PIRATE PERCH	S1	R3UB,L1AB, R3AB	2,3,8,9	
BUTEO LINEATUS	RED-SHOULDERED HAWK	E1	PFO		
ETHEOSTOMA CHLOROSOMUM (MAY)	BLUNTHOSE DARTER	E1	R3UB	2,8,9	4
EUPHYDRAS PHAETON	BALTIMORE	T1	PEN,PSS		1,2,3
NALIAEETUS LEUCOCEPHALUS	BALD EAGLE	EF1,EFK,EFM, EFN	L1OW,PFO,R 2OW,L2EM,L 2UB,L2US,L		1,2,3
ICTHYOMYZON CASTANEUS	CHESTNUT LAMPREY	T1,EK	R2UB,R3UB, L1UB	2,3,9	3
LAMPASILIS HIGGINSI (LEA)	HIGGINS EYE	EF1,EFM,EFN	R2UB		1,3,4
LUTRA CANADENSIS	RIVER OTTER	T1,WM,EM	R2US,R2UB, R2AB,R3UB, L1UB	2,3,6,8	3,4,5
NECTURUS MACULOSUS	MUDPUPPY	E1	R2UB,R3UB, L1AB,L2EM	1,2,6,7	3
NOTROPIS TEXANUS (GIRARD)	WEED SHINER	E1	R3UB,R2UB	2	3
RALLUS ELEGANS	KING RAIL	E1,EM	PEN,R2EM,L 2UB,PAB		3
** COUNTY: APPANOOSE					
NALIAEETUS LEUCOCEPHALUS	BALD EAGLE	EF1,EFK,EFM, EFN	L1OW,PFO,R 2OW,L2EM,L 2UB,L2US,L		1,2,3
MYOTIS SODALIS	INDIANA BAT	EF1,EFM	PFO		1,3
RANA AREOLATA	CRAMPISH FROG	E1	R3UB,R3US,	8	3

THREATENED AND ENDANGERED
ANIMAL SPECIES OF KANSAS BY COUNTY

SCIENTIFIC NAME	COMMON NAME	STATUS CODE	WETLAND TYPES	SUBSTRATE	ENDCAUSE
** COUNTY: ALLEN HETERODON PLATIRHINOS LATREILLE NOTURUS PLACIDUS (TAYLOR)	EASTERN HOGNOSE SNAKE NEOSHO MADTOM	TK TFK,TFM	PSS,PEM R3UB,R2UB	2,4 5,6,7	3
** COUNTY: ANDERSON HOCOMIS BIGUTTATUS (KIRTLAND)	HORNEYHEAD CHUB	TK	R3UB,R3AB	6,7	3,4
** COUNTY: ATCHISON ICHTHYOMYZON CASTANEUS	CHESTNUT LAMPREY	TI,EK	R2UB,R3UB, L1UB	2,3,9	3
PMATIOPSIS LAPIDARIA SCAPHIRHYNCHUS ALBUS (FORBES AND RICHARDSON)	AMPHIBIOUS SNAIL PALLID STURGEON	EK EFI,EFK,EFM, EFM	R2UB,R2OW	2,3,6	3,4,5
** COUNTY: BARBER ETHEOSTOMA CRAGINI (GILBERT) GRUS AMERICANA	ARKANSAS DARTER WHOOPIING CRANE	TK,RM EFK,EFM	R3UB,R3AB R2UB,L2UB, PUB,L2AB,P EM	2,3,6 2,8	3 1,3,4,5
HETERODON PLATIRHINOS LATREILLE NOTROPIS GIRARDI HUBBS AND ORTENBURGER	EASTERN HOGNOSE SNAKE ARKANSAS RIVER SHINER	TK EK	PSS,PEM R2UB	2,4 2	3
** COUNTY: BARTON CHARADRIUS MELODUS GRUS AMERICANA	PIPING PLOVER WHOOPIING CRANE	TFI,TFK,TFM, TFM EFK,EFM	R2US,L2US, PUB R2UB,L2UB, PUB,L2AB,P EM	2 2,8	1,3 1,3,4,5
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	EFI,EFK,EFM,	L1OW,PFO,R		1,2,3

THREATENED AND ENDANGERED
ANIMAL SPECIES OF MISSOURI BY COUNTY

SCIENTIFIC NAME	COMMON NAME	STATUS CODE	WETLAND TYPES	SUBSTRATE	ENDCAUSE
** COUNTY:					
FUNDULUS ZEBRINUS (JORDAN AND GILBERT)	PLAINS KILLIFISH	RM	R3UB,R2UB	2,6	
PLETHOBASUS CYPHIUS (RAFINESQUE)	SHEEPNOSE	EM	R3UB,R2UB, R3RB	3,6,7	
** COUNTY: ADAIR					
ANODONTA SUBORBITICULATA (SAY)	FLAT FLOATER	EM,EK	R2UB,L1UB	3,8	
HYBOGNATHUS HANKINSONI	BRASSY MINNOW	RM	R3UB	2,6,9	3
RANA AREOLATA CIRCULOSA (RICE AND DAVIS)	NORTHERN CRAWFISH FROG	TK,WM	L2AB,R4US, R4AB,PEM		3
** COUNTY: ANDREW					
ELAPHE VULPINA VULPINA (BAIRD AND GIRARD)	WESTERN FOX SNAKE	EM	PEM,PAB,R2 EM,R2AB,PF O		3
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	EFI,EFK,EFM, EFN	L1OW,PFO,R 2OW,L2EM,L 2UB,L2US,L		1,2,3
HYBOPSIS GRACILIS (RICHARDSON)	FLATHEAD CHUB	TK,EM	R3UB,R2UB	2	3
SCAPHIRHYNCHUS ALBUS (FORBES AND RICHARDSON)	PALLID STURGEON	EFI,EFK,EFM, EFN	R2UB,R2OW	2,3,6	3,4,5
SISTRURUS CATENATUS TERGINIUS	WESTERN MASSASAUGA	EM	PEM,PAB,R2 EM,R2AB		3
** COUNTY: ATCHISON					
ACCIPENSER FULVESCENS (RAFINESQUE)	LAKE STURGEON	EI,EM,IN	R2UB,R2OW, L1UB,R2RB	2,3,6,7	3,4,5
ELAPHE VULPINA VULPINA (BAIRD AND GIRARD)	WESTERN FOX SNAKE	EM	PEM,PAB,R2 EM,R2AB,PF		3

11/02/

THREATENED AND ENDANGERED
ANIMAL SPECIES OF NEBRASKA BY COUNTY

SCIENTIFIC NAME	COMMON NAME	STATUS CODE	WETLAND TYPES	SUBSTRATE	ENDCAUSE
** COUNTY: ADAMS GRUS AMERICANA	WHOOPIING CRANE	EFK,EFN	R2UB,L2UB, PUB,L2AB,P EM	2,8	1,3,4,5
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	EFI,EFK,EFM, EFN	L10W,PFO,R 20W,L2EM,L 2UB,L2US,L		1,2,3
** COUNTY: ARTHUR GRUS AMERICANA	WHOOPIING CRANE	EFK,EFN	R2UB,L2UB, PUB,L2AB,P EM	2,8	1,3,4,5
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	EFI,EFK,EFM, EFN	L10W,PFO,R 20W,L2EM,L 2UB,L2US,L		1,2,3
** COUNTY: BLAINE GRUS AMERICANA	WHOOPIING CRANE	EFK,EFN	R2UB,L2UB, PUB,L2AB,P EM	2,8	1,3,4,5
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	EFI,EFK,EFM, EFN	L10W,PFO,R 20W,L2EM,L 2UB,L2US,L		1,2,3
** COUNTY: BOX BUTTE GRUS AMERICANA	WHOOPIING CRANE	EFK,EFN	R2UB,L2UB, PUB,L2AB,P EM	2,8	1,3,4,5
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	EFI,EFK,EFM, EFN	L10W,PFO,R 20W,L2EM,L 2UB,L2US,L		1,2,3

**REGION VII THREATENED AND ENDANGERED
PLANT SPECIES
BY STATE AND COUNTY OF OCCURRENCE**

THREATENED AND ENDANGERED
PLANT SPECIES OF MISSOURI BY COUNTY

SCIENTIFIC NAME	COMMON NAME	STATUS CODE	WETLAND TYPES	SUBSTRATE	ENDCAUSE
** COUNTY: ANDREW HYPERICUM PYRAMIDATUM AIT.	GREAT ST. JOHN'S-WORT	EH,RK	PEN	3,5	3
** COUNTY: ATCHISON IVA XANTHIFOLIA LYSIMACHIA THYRSIFLORA (L.) PERS.	COARSE SUMPWEED TUFTED OR WATER LOOSESTRIFE	UM EM	PEN PEN,PAB,PF O		
PLATANThERA PRAECLARA SHEVIK & BOWLES	WESTERN PRAIRIE FRINGED ORCHID	TFM,TFN,TFK, TFI	PEN	3,4	3
** COUNTY: BARRY PONTIHALIS SULLIVANTII LINDB. JUNCUS NODOSUS L.	A MOSS KNOTTED RUSH	EM EM	R3RS,R3US L2EM,PEN,R 3US,PUS	2	
PLATANThERA CLAVELLATA (MICHX.) SPRENG. VAR. CLAVELLATA	GREEN WOODLAND ORCHID	EM	PEN,PFO		
TRADESCANTIA OZARKANA ANDERSON & WOODSON	OZARK SPIDERWORT	RH	PFO	5	
** COUNTY: BARTON CAREX ALBOLUTESCENS SCHWEINITZ CAREX MICRODONTA TORR. & HOOK CAREX STRAMINEA WILD. CHELONE OBLIQUA L. VAR. SPECIOSA ELEOCHARIS LANCEOLATA FERNALD ELEOCHARIS PARVULA (R. & S.) LINK VAR. ANACHAETA GENTIANA ANDREWSII GRISEB. VAR. ANDREWSII	GREENISH-WHITE SEDGE LITTLE MOUTH SEDGE STRAW SEDGE ROSE TURTLEHEAD LANCE-LIKE SPIKE RUSH SMALL SPIKE RUSH CLOSED GENTIAN	UM UM UM EM UM,RK RH EM	PEN,PFO PEN PEN,PFO PEN,PFO PEN,L2EM L2US,L2EM, PEN PFO,L2EM,P EM,PSS	2 5 2 2,8	
MARSILEA MUCRONATA A. BRAUN PASPALUM DISSECTUM L.	HAIRY WATER-CLOVER MUDBANK PASPALUM	OM EM	L2EM L2US,PEN,R 3US,L2EM	8	
PILULARIA AMERICANA A. BRAUN	AMERICAN PILLWORT	RH,RK	L2EM,L2AB, PEN	2	

THREATENED AND ENDANGERED
PLANT SPECIES OF KANSAS BY COUNTY

SCIENTIFIC NAME	COMMON NAME	STATUS CODE	WETLAND TYPES	SUBSTRATE	ENDCAUSE
** COUNTY: ALLEN CAREX TRIANGULARIS BOECKL. SAGITTARIA AMBIGUA J.G.SM.	TRIANGULAR SEDGE KANSAS ARROWHEAD	EM,RK EM,RK	PEM,PFO L2EM,PEM	4 8	
** COUNTY: ATCHISON ALOPECURUS AEQUALIS SOBOL. CAREX AQUATILIS WANLENB. VAR. ALTIOR (RYDB.) FERN. PLATANATHERA PRAECLARA SHEVIAK & BOWLES	FLOATING FOXTAIL GRASS WATER SEDGE WESTERN PRAIRIE FRINGED ORCHID	RM,RK RK TFM,TFN,TFK, TFI	L2EM,PEM PEM PEM	3 3,4	 3
** COUNTY: CHEROKEE CAREX TRIANGULARIS BOECKL. ELEOCHARIS LANCEOLATA FERNALD ELEOCHARIS WOLFII GRAY LINNOSCIADIUM PINNATUM (DC.) MATHIAS & CONSTANCE MECARDONIA ACUMINATA (WALT.) SHALL RHYNCHOSPORA HARVEYI BOOTT URTICA CHAMAEDRYOIDES PURSH	TRIANGULAR SEDGE LANCE-LIKE SPIKE RUSH WOLF'S SPIKE RUSH DOG-SHADE TANSY OR PINNATE DOGSHADE WATER HYSSOP OR PURPLE MECARDONIA HARVEY'S BEAK-RUSH WEAK NETTLE	EM,RK LM,RK EM,PK EM,RK EM,RK RM,PK	PEM,PFO PEM,L2EM R3US,PEM,L 2EM PEM,PRB,L2 EM R3US,PEM,P FO PEM PFO,PEM	4 2 4 0,2,3,5 3,5	
** COUNTY: CHEYENNE LEMNA TRISULCA L.	STAR DUCKWEED	RM,RK	PAB,L10W,R 3AB,L2EM		
** COUNTY: CLOUD SPIRANTHES LUCIDA (H. H. EATON) AMES	YELLOW LIPPED OR SHINING LADIES' TRESSES	EI,RK	PEM,PRB,L2 US	4	
** COUNTY: COFFEY RHYNCHOSPORA HARVEYI BOOTT	HARVEY'S BEAK-RUSH	EM,RK	PEM	0,2,3,5	

PAGE NO. 1
10/14/93

THREATENED AND ENDANGERED
PLANT SPECIES OF NEBRASKA BY COUNTY

SCIENTIFIC NAME	COMMON NAME	STATUS CODE	WETLAND TYPES	SUBSTRATE	ENDCAUSE
** COUNTY: CHERRY PLATANHERA PRAECLARA SHEVIK & BOWLES	WESTERN PRAIRIE FRINGED ORCHID	TFM,TFN,TFK, TFI	PEM	3,4	3
** COUNTY: HALL PLATANHERA PRAECLARA SHEVIK & BOWLES	WESTERN PRAIRIE FRINGED ORCHID	TFM,TFN,TFK, TFI	PEM	3,4	3
** COUNTY: LANCASTER PLATANHERA PRAECLARA SHEVIK & BOWLES	WESTERN PRAIRIE FRINGED ORCHID	TFM,TFN,TFK, TFI	PEM	3,4	3
** COUNTY: SEWARD PLATANHERA PRAECLARA SHEVIK & BOWLES	WESTERN PRAIRIE FRINGED ORCHID	TFM,TFN,TFK, TFI	PEM	3,4	3

**SUMMARY OF KNOWN HABITAT USAGE
BY SUBSTRATE AND ASSOCIATED NWI HABITAT TYPE**

PAGE NO.
11/02/93

1

FIPS CODES FOR REGION VII, EPA

FIPS CODE	COUNTY NAME	STATE
** **STATE: IA		
19001	ADAIR	IA
19003	ADAMS	IA
19005	ALLAMAKEE	IA
19007	APPANOOSE	IA
19009	AUDUBON	IA
19011	BENTON	IA
19013	BLACK HAWK	IA
19015	BOONE	IA
19017	BREMER	IA
19019	BUCHANAN	IA
19021	BUENA VISTA	IA
19023	BUTLER	IA
19025	CALHOUN	IA
19027	CARROLL	IA
19029	CASS	IA
19031	CEDAR	IA
19033	CERRO GORDO	IA
19035	CHEROKEE	IA
19037	CHICKASAW	IA
19039	CLARKE	IA
19041	CLAY	IA
19043	CLAYTON	IA
19045	CLINTON	IA
19047	CRAWFORD	IA
19049	DALLAS	IA
19051	DAVIS	IA
19053	DECATUR	IA
19055	DELAWARE	IA
19057	DES MOINES	IA
19059	DICKINSON	IA
19061	DUBUQUE	IA
19063	EMMET	IA
19065	FAYETTE	IA
19067	FLOYD	IA
19069	FRANKLIN	IA
19071	FREMONT	IA
19073	GREENE	IA
19075	GRUNDY	IA
19077	GUTHRIE	IA
19079	HAMILTON	IA
19081	HANCOCK	IA
19083	HARDIN	IA
19085	HARRISON	IA
19087	HENRY	IA

PAGE NO.
11/02/93

1

CODES USED IN T&EPLANT.DBF AND T&EANIML.DBF

CODE

CODE DEFINITION

** ASSOCIATED STATUS CODES

EFI	FEDERALLY LISTED ENDANGERED, IOWA
EFK	FEDERALLY LISTED ENDANGERED, KANSAS
EFM	FEDERALLY LISTED ENDANGERED, MISSOURI
EFN	FEDERALLY LISTED ENDANGERED, NEBRASKA
EI	ENDANGERED, IOWA
EK	ENDANGERED, KANSAS
EM	ENDANGERED, MISSOURI
EN	ENDANGERED, NEBRASKA
OM	NO LONGER LISTED FOR MISSOURI (PRESUMED RECOVERED)
RM	RARE, MISSOURI
SI	SPECIES OF SPECIAL CONCERN, IOWA
TFI	FEDERALLY LISTED THREATENED, IOWA
TFK	FEDERALLY LISTED THREATENED, KANSAS
TFM	FEDERALLY LISTED THREATENED, MISSOURI
TFN	FEDERALLY LISTED THREATENED, NEBRASKA
TI	THREATENED, IOWA
TK	THREATENED, KANSAS
TN	THREATENED, NEBRASKA
UM	UNDETERMINED, MISSOURI
WM	WATCH LIST, MISSOURI
XM	EXTIRPATED, MISSOURI (MAY BE A MIGRANT SPECIE)

** ASSOCIATED SUBSTRATE

0	CLAY
1	BEDROCK
2	SAND
3	SILT
4	LOAM
5	LIMESTONE
6	COBBLE-GRAVEL
7	RUBBLE-BOULDER
8	MUD
9	ORGANIC MUCK-DEBRIS
X	CHERT

** ASSOCIATED VEGETATION

A	ALGAL
B	AQUATIC MOSS
C	ROOTED VASCULAR
D	FLOATING VASCULAR
E	UNKNOWN SUBMERGENT
F	DECIDUOUS
G	EVERGREEN
H	DEAD

PAGE NO.
11/02/93

2

CODES USED IN T&EPLANT.DBF AND T&EANIML.DBF

CODE

CODE DEFINITION

I PERSISTENT
J NONPERSISTENT
M MOSS

** DECLINE, REASONS FOR (ENDCAUSE)

1 PESTICIDE USE
2 HERBICIDE USE
3 HABITAT DESTRUCTION (INCLUDING ALTERATION IN WATER
FLOW)
4 WATER POLLUTION (INCLUDING SILTATION)
5 OVER FISHING, HUNTING, OVER UTILIZATION
6 OVER PICKING

** FLOWER COLOR (FLOCOLOR)

A APETALOUS OR NONE PRESENT
B BROWN, REDDISH-BROWN, OR YELLOW-BROWN
BR BROWNISH
BVP BLUE, VIOLET, OR PINK
BYB BROWN TO YELLOW BROWN
CY CREAMY WHITE OR YELLOWISH
G GREEN
GB GREENISH-BROWN OR BROWNISH
GBD GREENISH-BROWN OR GRAYISH
GBG GREEN TO BROWNISH GREEN
GBY GREENISH-BROWN OR YELLOWISH BROWN
GH GREENISH
GRB GREENISH TO REDDISH BROWN
GTB GREEN TO BROWN
GW GREENISH-WHITE
GY GREENISH YELLOW
GYG GREEN TO YELLOW-GREEN
N NON-FLOWERING PLANT
O ORANGE
OG OLIVE GREEN
OY ORANGE OR YELLOW
P PINK OR ROSE
PB PURPLISH BROWN
PR PINK, ROSE, OR RED
PRW PINK, ROSE, OR WHITE
PU PURPLISH
PV PINK OR PURPLISH
PW PINK OR WHITE
R RED
RV RED-PURPLE
V VIOLET, PURPLE, BLUE, OR LAVENDER
VG GREENISH-PURPLE

APPENDIX A.3

ECONOMICALLY SENSITIVE AREAS

Economically Sensitive Areas are currently being interpreted as locations of surface water intakes. Following, is a complete listing of surface water intakes in Iowa, Kansas, Missouri, and Nebraska. Updates of these list have been requested and will be incorporated into this appendix. There is also a listing of the River Water Intakes on the Missouri and Mississippi Rivers that follows the State listings.

APPENDIX A.3.a

REGION VII SURFACE WATER INTAKES

Revision 1
December, 1994

UTM COORDINATES FOR MUNICIPAL SURFACE WATER INTAKES IN IOWA (UTM ZONE 15)

PUBLIC WATER SUPPLY	SOURCE	X-COORD	Y-COORD	PERMIT #
CEDAR RAPIDS	CEDAR R	608452.00	4650991.00	1346
CLEAR LAKE	CLEAR L	468585.00	4775580.00	3315
HUMBOLDT	SPRING 1	399767.70	4730320.00	3388
HUMBOLDT	SPRING 2	399752.30	4730307.00	3388
SPENCER	GRAVEL PIT	321890.40	4780096.00	103
ROCK RAPIDS	ROCK R	243288.10	4814631.00	3222
ORIENT	L ORIENT	379603.60	4561344.00	2637
ARNOLDS PARK	W OKOBOJI	325986.60	4805547.00	5557
WAHPETON	W OKOBOJI	324631.60	4806109.00	2994
MILFORD	W OKOBOJI	325611.00	4801959.00	278
SPIRIT LAKE	SPIRIT L	329905.30	4812628.00	1793
LAKE PARK	SILVER L	311418.80	4812890.00	6371
GREENFIELD	GREENFLD L	375999.40	4572723.00	2218
GREENFIELD	NODAWAY L	374685.00	4571726.00	2218
GREENFIELD	NODAWAY R	374074.90	4571960.00	2218
CORNING	L BINDER	356249.60	4540364.00	1674
CORNING	CITY RES	354729.40	4539934.00	1674
PANORA	MID RAC R	385672.50	4615857.00	6307
BARTLETT HILLS ASSOC	RESERVOIR	266658.90	4538063.00	3335
CLARINDA	NODAWAY R	329964.80	4511847.00	102
COUNCIL BLUFFS	MISSOURI R	258724.90	4573866.00	6055
MOUNT AYR	PLATTE R	381422.70	4513810.00	6136
MOUNT AYR	LOCH AYR	395277.80	4510612.00	6136
MOUNT AYR	OLD RESERV	396454.60	4509049.00	6136
SUN VALLEY LAKE RWA	SUN VALY L	410077.10	4521868.00	4925
BEDFORD	L 3 FIRES	357198.40	4507646.00	2684
BEDFORD	RESERVOIR	355238.30	4504708.00	2684
BEDFORD	QUARRY	355911.50	4503274.00	2684
BEDFORD	102 R	355200.40	4502609.00	2684
LENOX	EAST L	369436.10	4528275.00	2647
LENOX	WEST L	369101.00	4528168.00	2647
LENOX	MAHARRY L	369232.00	4528000.00	2647
AFTON	GRAVEL PIT	400268.20	4543739.00	199
AFTON	L AFTON	398256.30	4543153.00	199
CRESTON	SITE M-1	394599.80	4545747.00	5649
CRESTON	SUMMIT L	382578.80	4546158.00	5649
CENTERVILLE	COOPER CR	508366.00	4508782.00	1359
CENTERVILLE	LOWER RES	509872.10	4507110.00	1359
CENTERVILLE	UPPER RES	509542.70	4506629.00	1359
RATHBUN RWA	L RATHBUN	509207.40	4518725.00	3663
OSCEOLA	WEST L	432364.80	4543366.00	142
LAKEVIEW HEIGHTS HOA	RESERVOIR	433413.80	4599439.00	2930
LAMONI	HOME L	419818.40	4497771.00	6369
LAMONI	HOME POND	419545.60	4497443.00	6369
LAMONI	L LASHANE	417501.80	4497847.00	6369
LEON	LITTLE R	434252.10	4510907.00	1701
WINTERSET	CEDAR L	416619.40	4580267.00	2099
PELLA	DES MOIN R	502771.50	4578412.00	2895
ALBIA	RESERVOIR	515311.10	4544393.00	6370
DES MOINES	RACCOON R	445848.70	4602543.00	5035
MONTEZUMA	DIAMOND L	536999.60	4603446.00	6218
MONTEZUMA	L PONDEROS	534974.60	4603022.00	6218
LINEVILLE	RESERVOIR	456827.60	4494320.00	3270
CORYDON	CORYDON L	471981.20	4510898.00	3528
HUMESTON	HUMESTON L	457310.60	4525569.00	6223

UTM COORDINATES FOR MUNICIPAL SURFACE WATER INTAKES IN IOWA (UTM ZONE 15)

PUBLIC WATER SUPPLY	SOURCE	X-COORD	Y-COORD	PERMIT #
BLOOMFIELD	L FISHER	547111.40	4512012.00	6084
BURLINGTON	MISS R	660393.40	4520410.00	5801
MOUNT PLEASANT	SKUNK R	616054.80	4532472.00	2674
FAIRFIELD	RESERV 2	588383.30	4541763.00	1691
FAIRFIELD	WALTON L	589613.60	4540448.00	1691
FAIRFIELD	RESERV 1	587971.60	4541228.00	1691
IOWA CITY	IOWA R	621637.70	4613341.00	629
U OF I	IOWA R	621493.80	4612646.00	597
KEOKUK	MISS R	636374.30	4471664.00	6040
FORT MADISON	MISS R	644248.40	4498869.00	2169
IOWA-AMERICA WATER CO	MISS R	704430.60	4600014.00	6117
OTTUMWA	BLACK L	549894.80	4539309.00	6292
OTTUMWA	S LAGOON	549040.30	4540201.00	6292
OTTUMWA	DES M R	548940.30	4540643.00	6292
OTTUMWA	N LAGOON	547845.80	4540892.00	6292
DES MOINES	DES M R	446499.80	4607607.00	5035

X. KANSAS

4. Kansas Poison Control Centers (continued)

Great Bend	Central Kansas Medical Center 3515 Broadway Great Bend, KS 67530	(316) 792-2511 (ext. 115)
Hays	Hadley Regional Medical Center 201 East 7th Street Hays, KS 67601	(913) 628-8251 (ext. 145)
Kansas City	Mid-America Poison Center University of Kansas 39th & Rainbow Blvd Kansas City, KS 66103	(913) 588-6633 (800) 332-6633 (Statewide)
Lawrence	Lawrence Memorial Hospital 325 Main Street Lawrence, KS 66044	(913) 749-6100 (ext. 162)
Salina	St. John's Hospital 139 North Penn Street Salina, KS 67401	(913) 827-3187
Topeka	Northeast Kansas Poison Center Stormont-Vail Medical Center 1500 SW 10th Street Topeka, KS 66604	(913) 354-6100
Vichita	Vesley Medical Center 550 North Hillside Avenue Vichita, KS 67214	(316) 688-2277

5. Kansas Surface Water Supplies

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Allen-Admire City	City Lake	(316) 528-3413 (City E)
Water Supply	Sec. 11, T16S, R12E	(316) 528-3234 (Plant)
City Clerk	Lyon County	(316) 528-5545 (Sheriff)
Allen 66833		(316) 528-5566 (Mayor)
Alma City	Middle Branch Trib.	(913) 765-3922 (City E)
Water Supply	to Mill Creek -	(913) 765-3502 (Shop)
City Clerk	Impoundment	
Alma 66401	NE 1/4, Sec. 26, T12S	
Max Kraus	R10E, Wabaunsee Co.	(913) 765-3828 (Res)
Altamont City Water	Big Hill Water	(316) 764-5612 (City E)
Supply PWSD #4	Supply	(316) 355-2721 (24 hrs)
City Hall Building		
Altamont 67330		

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Altoona City Water Supply City Clerk Altoona 67330 Leon Forsyth	Verdigris River	(316) 568-5415 (City H) (316) 568-2120 (Plant) (316) 568-5545 (Res)
Anderson County RWD #2 Westphalia 66093	Impoundment Sec. 36, T21S, R17E Anderson County	(913) 489-2345 (F D)
Atchison City Water Supply 1125 S. 4th Atchison 66002 Mr. M.D. Cavanaugh	Missouri River (Mile 423.3)	(913) 367-3067 (24 hr) (913) 367-4323
Augusta City Water Supply P. O. Box 489 Augusta 67010 Gary Lofton	ElDorado Reservoir	(316) 775-6301 (City H) (316) 775-2301 (Plant) (316) 733-4769 (Res)
Bartlett City Water Supply City Clerk Bartlett 67332	Impoundment Sec. 28, T34S, R20E Labette County	(316) 226-3333 (City H)
Baxter Springs City Water Supply City Hall - 11th & Park P.O. Box 577 Baxter Springs 66713	Spring River	(316) 856-2112 (Pol) (316) 856-2733 (Plant) (316) 856-2114 (City H)
Beloit City Water Supply 119 N Hersey Ave. Beloit 67420	Solomon River	(913) 738-3551 (City H) (913) 738-2275 (Plant) (913) 738-2203 (Pol)
Blue Mound City Water Supply City Hall Blue Mound 66010	City Lake Sec. 7 T22S, R27E Linn County	(913) 756-2473 (City Clerk) (913) 756-2209 (Fire Dept)
Bronson City Water Supply City Clerk Bronson 66716 Terry Johnston	Reservoir Sec. 7, T25S, R27E Bourbon Co.	(316) 939-4578 (8-12 AM) (316) 939-4793 (Clark's res) (316) 939-4791 (Mayor's res)

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Buffalo City Water Supply P. O. Box 122 Buffalo 66717	Buffalo Creek Water Supply Pits SW 1/4, Sec. 12 T27S. R15E. Wilson County	(316) 537-8755 (City Office & Water Plant)
Burlingame City Water Supply City Hall-101 E. Santa Fe Burlingame 66413 Norman Bloomquist	Dragoon Creek	(913) 654-2414 (City H) (913) 654-3431 (Plant) (913) 654-3998 (Res)
Burlington City Water Supply City Hall-301 Neosho Burlington 66839	Neosho River	(316) 364-5134 (City H) (316) 364-8132 (Plant) (316) 364-2123 (Sheriff)
Burning Tree Villas Water Supply Rural Route #3 Box 201 Olathe 66061	Impoundment SE 1/4, NE 1/4 Sec. 34 T13S. R22E. Johnson Co.	(913) 884-8488
Caney City Water Supply City Hall. 211 W. 5th Caney 67333 Walter Moore Carol Cohen. City Clerk	Little Caney River	(316) 879-2772 (City H) (316) 879-2141 (Pol) (316) 673-8081 (Supr.) (316) 879-2573 (Clark)
Carbondale City Water Supply City Hall-P. O. Box 70 234 Main Carbondale 66414	Strowbridge Creek Reservoir	(913) 564-7108 (AM hrs) (913) 564-7377 (Pol)
Cedar Vale City Water Supply City Hall-Box 117 Cedar Vale 67024 Lavina Blenden. Mayor	Caney River	(316) 759-2244 (City H) (316) 759-2641 (Plant) (316) 759-2881 (Res)
Chanute City Water Supply P. O. Box 907 Chanute 66720 Ralph Berthor Steve Kullie Larry Shepard	Neosho River	(316) 431-9300 (City H) (316) 431-1910 (24 hrs) (316) 431-1910 (316) 431-2840 (316) 431-9306

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Cherryvale City Water Supply City Hall-123 W. Main Cherryvale 67337	Verdigris River	(316) 336-2776 (City H) (316) 336-3161 (Plant) (316) 336-2121 (F D)
Chatopa City Water Supply City Hall-332 Maple P. O. Box 312 Chatopa 67336	Neosho River	(316) 236-7311 (24 hrs) (Pol) (316) 236-7222 (F D)
Coffeyville City Water Supply Municipal Bldg. 7th & Walnut Coffeyville 67337	Verdigris River	(316) 251-1700 (24 hrs) (316) 251-7000 (City H) Ext. 259 (Plant) Ext. 276
Council Grove City Water Supply P. O. Box 313 Council Grove 66846	Council Grove City Lake SW of Council Grove Reservoir	(316) 767-5321 (24hrs)
Edna City Water Supply City Clerk Edna 67342	Lake Sec. 36, T34S, R18E Labette County	(316) 922-3841 (City Office after 1:00 p.m.) (316) 922-3290 (Pol) (316) 992-7369 (Plant) (316) 922-3366 (Res)
Charles Manley		
El Dorado City Water Supply P. O. Box 792 El Dorado 67042	El Dorado Reservoir	(316) 321-9100 (24 hrs) Ext. 241
Elk City Water Supply City Hall Elk City 67344	Elk River	(316) 627-4315 (Plant)
Emporia City Water Supply 2910 W. 24th Street Emporia 66801	Neosho River & Cottonwood River	(316) 342-3413 (24 hrs) (316) 342-1918 (WVTP)
Erie City Water Supply City Hall-224 S. Main Erie 66733	Neosho River	(316) 244-3488 (Plant) (316) 244-3243 (Sheriff)
Eureka City Water Supply City Hall-309 N. Oak Eureka 67045 Larry Fritz	Otis Creek Reservoir	(316) 583-6511 (City H) (316) 583-5222 (Off) (316) 583-6429 (Res)

X. KANSAS

S. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Ft. Scott City Water Supply City Hall 1 East 3rd Ft. Scott 66701	Marmaton River Lake Ft. Scott Rock Creek Lake	(316) 223-0550 (316) 223-5160 (Plant. 24 hr)
Franklin County RWD #6 P. O. Box 6 Rantoul 66079	Marais des Cypres River SW 1/4, Sec. 22 T175, R21E, Franklin County	(913) 878-3388 (Off) (913) 878-3535 (Plant)
Fredonia Water Supply City Hall-314 N. 7th Fredonia. 66736 Martin Conrad	Fall River	(316) 378-2231 (316) 378-2700 (Plant)
Gardner City Water Supply City Hall P. O. Box 347 Gardner 66030	Gardner Lake Sec. 11, T14S, R22E Johnson County	(913) 884-7535 (913) 884-6802 (After hrs)
Garnett City Water Supply City Hall 131 West 5th P.O. Box 8 Garnett 66030	Cedar Creek Garnett Lake	(913) 448-5496 (913) 448-5425 (after hrs)
Grenola City Water Supply City Hall - Main St. Grenola 67346	Caney River	(316) 318-2860
Gridley City Water Supply P. O. Box 182 Gridley 66852 George Vanarsdale, Water Dept Supvr John Zuern, Mayor	Gridley Lake	(316) 826-3145 (316) 826-2825 (Res) (316) 826-4733 (Res)
Hartford City Water Supply City Hall - P. O. Box 176 Hartford 66854 Ron Thuma (Mayor) Ves Burris	Neosho River	(316) 352-5513 (316) 352-5822 (Res) (316) 352-5763 (Res)

I. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Harveyville City Water Supply City Clerk Harveyville 66431 Dean Crumm	Impoundment on intermittent tributary to Draoon Creek. Sec. 33, T14S, R13E, Wabaunsee County	(913) 589-2310 (913) 589-2440 (Plant) (913) 589-2327 (Mayor) (913) 589-2461 (Supr)
Barington City Water Supply City Hall 17 N. Broadway Barington 67449	Lyons Creek Watershed Dist Sec. 17, T16S, R4E	(913) 258-2271 (913) 258-2226 (Pol)
Hillsboro City Water Supply City Hall - 116 E. Grand Hillsboro 67063	Marion Reservoir	(316) 947-3162 (316) 947-3440 (Pol) (316) 382-2144 (Sheriff)
Holton City Water Supply City Hall 430 Pennsylvania Ave. P.O. Box 366 Holton 66436	Water District #1 Rural Water District (Wells)	(913) 364-2721 (City H) (913) 364-3719 (24 hr) (PowerPlant) (913) 364-2135
Horton City Water Supply City Hall 205 E. 8th St. Horton 66439 Kleo Cauffman, Supt.	Mission Lake Sec. 28, T4S, R17E Brown County	(913) 486-2681 (913) 486-2694 (Pol) (913) 486-3911 (Plant) (913) 486-3851 (Res)
Howard City Water Supply P. O. Box 335 Howard 67349 Mr. Francis Morgan	Impoundment 2 miles east of Town (City Lake)	(316) 374-2501 (Plant) (316) 374-2202 (City Office) (316) 374-2505
Humboldt City Water Supply 701 Bridge St. Humboldt 66748	Neosho River	(316) 473-3232 (316) 473-3131 (24 hr)
Independence City Water Supply City Hall-120 6th St. Independence 67301	Verdigris River	(316) 331-2500 (316) 331-2130 (24 hr)
Iola City Water Supply City Hall - 2 W. Jackson Iola 66749	Neosho River	(316) 365-2771 (City H) (316) 365-5612 (24 hr)

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Jefferson County RWD #11 P.O. Box 493A Ozawie 66070	Perry Reservoir NE 1/4, Sec. 19, T9S R17E Jefferson Co.	(913) 444-2600 (9:00-12:00)
Darrell Bates		(913) 876-2495 (Res)
William L. Merrifield		(913) 444-2474 (Res)
Johnson Co. Airp. Water Supply Johnson Co. Airport Commission Industrial Airport. Johnson County, KS 66031	Lake Gardner Sec. 11, T14S, R22E Johnson County	(913) 782-5335 (913) 784-7635 (F D)
Johnson County Water District #1 and #2 5930 Beverly Mission 66202 Ralph Wyss and Bennet Kwan	Kansas River & Missouri River	(913) 772-3000
Kansas Army Ammunition Plant WS Day and Zimmerman, Inc. Parsons 67357	Neosho River NE 1/4, Sec. 33, T13S R21E, Labette County	(316) 461-7400 (24 hr)
Kansas City Water Supply Board of Public Utilities 700 Minnesota Avenue Kansas City, KS 66104	Missouri River	(913) 573-9000
Kickapoo Reserv. Water Supply Rural Route #1 Box 157A Horton 66439 Paul Cadue, Plant Mgr	Delaware River Sec. 32, T4S, R16E Brown County	(913) 466-2131 (913) 466-3579 (24 hr) (913) 466-2773 (Plant)
LaCygne City Water Supply City Hall P. O. Box 600 La Cygne 66040 Gale McReynolds, Supt. Nate Harris, Mayor	Marais des Cygnes River	(913) 757-2144 (913) 757-2053 (913) 757-2314 (Plant)
Lawrence City Water Supply City Offices P. O. Box 708 Lawrence 66044	Kansas River Clinton Reservoir	(913) 841-1600 (Plant) (913) 841-7722 (Off) (913) 843-2685 (after hrs)

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Leavenworth City Water Supply Leavenworth Water Dept. 601 Delaware Leavenworth 66048	Missouri River	(913) 682-1513 (Off) (913) 727-1902 (24 hr) (Plant)
Labo City Water Supply P. O. Box 14 Labo 66856 Gerald O'Neil	Labo City Lake Sec. 5, T19s, R14E Coffey County	(316) 256-6622 (316) 256-6764 (24 hr) (316) 256-6293 (Plant)
LeRoy City Water Supply City Hall P. O. Box 356 LeRoy 66857 Ron Ellis	Neosho River	(316) 964-2245 (316) 964-2231 (Plant) (316) 964-2390 (Res)
Longton City Water Supply City Hall Kansas Ave. Longton 67352 Glen Barnaby Vilbur Persinger	Elk River	(316) 642-2225 (City H) (316) 642-2231 (Res) (316) 642-3755 (Res)
Louisburg City Water Supply P.O. Box 489 Louisburg 66053 Bob Gardner, Public Works Dir	City Lake & Impoundment Sec. 32, T16S, R25E Miami County	(913) 837-5371 (913) 294-4536 (Res)
Lyndon City Water Supply City Hall-230 Topeka Ave. Lyndon 66451 Tom Lauszler, Water Supt.	Lyndon City Lake Salt Creek	(913) 828-4902 (913) 828-3121 (Sheriff) (913) 828-3326 (Res)
Madison City Water Supply P. O. Box 247 Madison 66860 Max Kimberlin	Madison City Lake Sec. 24, T22S, R12E Greenwood County	(316) 437-2556 (316) 437-2444
Marion City Water Supply 203 N. Third Street Marion 66861	Marion Reservoir	(316) 382-3703 (316) 382-2666 (Plant) (6:00 am to 10:00 pm)

X. KANSAS.

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Marysville City Water Supply Municipal Bldg.-209 N. 8th Marysville 66508	Big Blue River	(913) 562-5331 (913) 562-2343 (Pol) (913) 562-3136 (Plant)
Miami County RWD #2 R.R. #3 P.O. Box 186 Hillsdale 66036 Fred Koup	Hillsdale Reservoir Ven Creek	(913) 783-4325 (24 hrs)
Milford City Water Supply P. O. Box 0, Milford 66514 Eve Ackermann	Milford Reservoir	(913) 463-5490 (913) 762-2323 (Sheriff) (913) 463-5498 (Res)
Mitchell County RWD #2 P. O. Box 17 Glen Elder 67446	Glen Elder Reservoir	(913) 565-3341 (24 hr) (913) 565-3281 (Sec.)
Moline City Water Supply City Clerk-Box 253 Moline 67353 Dennis Hogan	Water Shed	(316) 647-3665 (316) 647-3485 (24 hr) (316) 647-3229 (Plant)
Moran City Water Supply P. O. Box 236 Moran 66755 Robert Rhodes	Neosho River	(316) 217-4271 (316) 217-4301 (Plant)
Mound City Water Supply City Hall P. O. Box 332 Mound City 66056 Don Kelly Richard Perkins	Little Sugar Creek plus impoundment on tributary to Sugar Creek in Sec. 16, T22S, R13E Linn County	(913) 795-2202 (913) 795-2749 (Plant) (913) 795-2677 (Res) (913) 795-2183 (Res)
Mound Valley City Water Supply City Hall P. O. Box 164 Mound Valley 67354 John Hess	Public Wholesale Water Supply District #4	(316) 328-3411

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Neodesha City Water Supply P. O. Box 298 Neodesha 66757 Roy Alexander, Supr.	Fall River	(316) 325-2750 (316) 325-2642 (F D)
Neosho County RVD #2 Rural Route #1 Savonburg 66772 Marion Page Mr. Gordon	Canville Creek Impoundment Sec. 34, T27S, R20E, Neosho County	(316) 754-3868 (316) 754-3868 (Plant) (316) 431-4013 (316) 431-1820
Norton City Water Supply P. O. Box 160 Norton	Keith Sebelius Reservoir	(913) 877-3355 (913) 877-3202 (Plant) (913) 877-3668 (Supr) (913) 877-2255 (24 hr)
Olathe City Water Supply P. O. Box 768 Olathe 66061	Cedar Creek Impoundment (Lake Olathe) Sec. 32, T13S R23E, Johnson County	(913) 782-7551 (24 hr) (913) 782-2600 (City E)
Olpe City Water Supply P. O. Box 224 Olpe 66865	Impoundment Sec. 3, T21S, R23E Lyon County	(316) 475-3780 (316) 475-3284 (Res) (City Clerk) (contact Emporia City Water)
Osage City Water Supply City Hall 5th and Main Osage City 66523	Melvern Reservoir	(913) 528-4124 Water Dept) (913) 528-3851 (24 hr) (913) 528-4351 (Plant)
Osage County Box 35, R.R. 1 Vassar 66543 Gerald Scheid, Plant Mgr	Pomona Reservoir	(913) 828-4545 (Plant) (913) 828-4785 (After hours)
Osawatomie City Water Supply City Hall-Main at 5th Osawatomie 66064	Marais des Cygnes River	(913) 753-2101 (Pol) (913) 753-4138 (24 hr)
Osvego City Water Supply 703 5th St. Osvego 67356	Neosho River	(316) 795-4433 (316) 795-4823 (Water Plant) (316) 795-2565 (Sheriff)

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Ottawa City Water Supply City Hall-4th and Walnut Ottawa 66067 Jack Davis	Marais des Cygnes River	(913) 242-5966 (24 hr) (913) 242-2190
Paola City Water Supply P. O. Box 409 Paola 66071	Little Bull Creek & Lake Miola Sec. 11, T17S, R23E Miami County	(913) 294-2397 (City H) (913) 294-3856 (Plant) (913) 294-4191 (Pol)
Parker City Water Supply City Clerk Parker 66072 Tomt Borum, Water Supt	Impoundment Sec. 8, T20S, R22E Linn County	(913) 898-2920 (City Clerk) (913) 898-3810 (24 hr)
Parsons City Water Supply P. O. Box 1037 Parsons 67357	Labette Creek Neosho River	(316) 471-0900 (Off) (316) 471-1650 (24 hr)
Pleasanton City Water Supply P. O. Box 399 Pleasanton 66075 Bill Anderson, Supr.	Pleasanton City Lake Sec. 29, T21S R25E Linn County	(913) 352-8257 (913) 755-2666 (Sheriff) (913) 352-8875 (913) 352-8258 (Water Plant)
Prescott City Water Supply City Clerk Prescott 66767	City Lake Sec. 8, T23S, R25E Linn County	(913) 471-4521 (City H) (913) 471-4374 (Clerk)
Princeton City Water Supply City Hall c/o City Clerk Princeton 66078	Middle Creek NE 1/4, Sec. 13, T18S R19E, Franklin County	(913) 937-2444 (Fire Dept) (913) 242-3800 (Sheriff)
Public Wholesale Water District #4	Big Hill Lake	(316) 315-2721
Russell City Water Supply City Hall 133 W. 8th P. O. Box 112 Russell 67665	Smoky Hill River Wells Fossil Lakes	(913) 483-6311 (24 hr) (913) 483-2121 (Pol) (913) 483-6313 (Plant)
Sabetha City Water Supply P. O. Box 187 Sabetha 66534	City Lake Sec. 1, T2S, R13E Neosho County	(913) 284-2158 (913) 284-2077 (Water Plant) (City Lake)

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Salina City Water Supply P. O. Box 1307 Salina 67402	Smoky Hill River	(913) 827-9625 (Office) (913) 825-4319 (Plant) (City Lake)
Seranton City Water Supply P. O. Box 218 Seranton 66537	Clinton Reservoir	(913) 793-2414 (City H)
Sedan City Water Supply 109 N. Chautauqua Sedan 67361 Lyle Plankensnip	2 City Lakes North of town Sec. 16, T33S, R11E Chautauqua County	(316) 725-3193 (City H) (316) 725-3134 (24 hr) (913) 725-3660 (Res)
Severy City Water Supply P. O. Box 128 Severy 67137 Margery Pape	Impoundment on trib. to Salt Creek Sec. 11, T28S, R11E Greenwood County	(316) 736-2323 (Off) (316) 736-2801 (Res)
Shawnee County RFD #8 3260 SE Tecumseh Tecumseh 66542	City of Topeka Tank Topeka Reservoir & Clinton Lake Shawnee County	(913) 379-5553 (24 hr)
Spring Hill City Water Supply City Hall 100 W. Nichols Spring Hill 66083	City Lake Hillsdale Lake	(913) 686-3664 (Off) (913) 686-2700 (Pol)
St. Paul City Water Supply City Hall P. O. Box 311 St. Paul 66771 Emil A. Kennedy, Jr.	Neosno River	(316) 449-2266 (9:00-1:00) (316) 449-2596 (24 hr)
Thayer City Water Supply P. O. Box 157 Thayer 66776	City Lake Impoundment Sec. 31 T29S, R18E Neosno County	(316) 839-5153 (City H) (316) 839-5675 (24 hr) (316) 839-5840 (Plant)
Topeka City Water Supply P. O. Box 1518 - 215 E. 7th Topeka 66601 Richard Pelton	Kansas River	(913) 235-1383 (Plant) (913) 234-0201 (24 hr) (913) 295-3827 (24 hr)

X. KANSAS -

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Toronto City Water Supply P. O. Box 235 Toronto 66777	Toronto Reservoir	(316) 637-2605 (316) 637-2711 (Res)
Tulakas Home Dev. Water Supply Rural Route #2 Chanute 66720 Gordon Realty	2 Impoundments NE 1/4, Sec. 22, T27S R17E, Wilson County	(316) 431-1820
Uniontown City Water Supply City Hall - P. O. Box 51 Uniontown 66779	Marmaton River	(316) 755-4742 (City H)
Valley Falls City Water Supply City Hall Valley Falls 66088	Delaware River	(913) 945-6612 (913) 945-3434 (Pol) (913) 945-3423
Wellington City Water Supply 317 S. Washington Wellington 67152 Terry May, Supr	Wellington City Lake E. Branch Prairie Creek also Chikaskia R.	(316) 326-2811 (City H) (316) 434-5351 (Lake) (316) 326-3331 (Pol)
White Memorial Camp Water Supply P. O. Box 165 R.R. #2, Box 60 Council Grove 66846	Council Grove Reservoir	(316) 767-5165
Vichita City Water Supply 435 W. Main Vichita 67202 Mike Withrow, Chief Eng	Chaney Reservoir	(316) 269-4963 (24 hr) (316) 722-4438 (Res)
Wind & Vares P.O. Box 64 P.O. Box 64 Ozawie 66070 Charlie Baker	Delaware River Perry Reservoir	(913) 464-2550
Vinfield City Water Supply P. O. Box 646 Vinfield 67156 Gilbert Spingler Don Kerns	Timber Creek City Lake	(316) 221-3060 (City H) (316) 221-2590 (Plant) (316) 221-2177 (Res) (316) 221-1516 (Res)

X. KANSAS

5. Kansas Surface Water Supplies (continued)

<u>TOWN & CONTACT</u>	<u>WATER SOURCE</u>	<u>TELEPHONE NUMBER</u>
Woodson County	Neosho River	(316) 963-2485 (24 hr)
RWD #1	at Neosho Falls	(316) 625-2147
P. O. Box 137		
Neosho Falls 66758		
Yates Center City	City Reservoir	(316) 625-2252 (City H)
Water Supply		(316) 625-2102 (Plant)
117 E. Rutledge		(316) 625-2147
Yates Center 66783		(Dispatcher)
Jerry Schaefer		

6. Johnson County Emergency Numbers (Area Code 913)

Director of Emergency Preparedness
 Dave Parrott
 782-5000 ext. 5291
 782-3038 (direct dial)
 782-0720
 (24 hr - Sheriff dispatch;
 ask for: Duty Officer for Emergency
 Preparedness)

Johnson County Environmental Department 780-5423 (hr)
 205 Flaming Drive 374-1209 (Pager)
 Olathe, KS 66061
 Mission, KS 66202
 Randy Bradley (Director)
 Betsy Betros (Pollution Control)
 Bill Heimann
 Inna Prilutsky

Leawood, KS
 Civil Defense
 Betty Bridges, Coordinator 642-5555 (Bus)
 648-5482 (Res)

Overland Park, KS
 Emergency Preparedness
 Joseph Reed, Coordinator 381-5252
 John Round, Police Captain

PUBLIC WATER SUPPLY INTAKE LOCATIONS

NAME OF SUPPLY	NAME OF STREAM	COUNTY	1/4 SECTION	SECTION	TWP	RANGE	RIVER MILE
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MISSOURI RIVER

St. Joseph	Missouri River	Buchanan	NESW	31	58N	35W	452.2
Kansas City	Missouri River	Clay	SE	10	50N	33W	370.5
Lexington	Missouri River	Lafayette	NW	33	51N	27W	322.5
Higginsville	Missouri River	Lafayette	--	24	51N	26W	306.0
Glasgow	Missouri River	Howard	--	8	51N	17W	227.0
Boonville	Missouri River	Cooper	NE	34	48N	17W	197.0
Jefferson City	Missouri River	Cole	--	6	44N	11W	144.0
170 St. Louis (Howard Bend)	Missouri River	St. Louis	--	--	45N	4E	37.0
St. Louis (Central Plant)	Missouri River	St. Louis	--	--	45N	4E	36.0
St. Charles	Missouri River	St. Charles	--	--	46N	5E	29.0
St. Louis County (North Plant)	Missouri River	St. Louis	--	--	47N	6E	20.5

MISSISSIPPI RIVER

Canton	Mississippi River	Lewis	--	36	62N	6W	342.3
Hannibal	Mississippi River	Marion	--	20	57N	4W	310.0
Louisiana	Mississippi River	Pike	--	18	54N	1W	282.8
St. Louis (Chain of Rocks)	Mississippi River	St. Louis	--	35	47N	7E	190.5
Cape Girardeau	Mississippi river	Cape Girardeau	--	28	31N	14E	54.3

MERAMEC RIVER

Kirkwood	Meramec River	St. Louis	--	--	44N	5E	Approx. 1.2
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PUBLIC WATER SUPPLY INTAKE LOCATIONS

NAME OF SUPPLY	NAME OF STREAM	COUNTY	1/4 SECTION	SECTION	TWP	RANGE	RIVER MILE
St. Louis County (South Plant)	Meramec River	St. Louis	--	--	44N	5E	Approx. 400' downstream from Hwy. 30 bridge
St. Louis County (Meramec Plant)	Meramec River	St. Louis	--	--	43N	6E	Approx 800' downstream from I-55

OTHERS

171	Adrian	South Grand River	Bates	SESE	34	43N	31W
	Amoret	Marais De Cygnes	Bates	NWNW	5	39N	33W
	Archie	South Grand River	Cass	NESE	28	43N	31W
	Bates Co. PWS #2	Miami Creek	Bates	SESW	10	41N	33W
	Branson	Lake Taneycomo	Taney	NESE	5	22N	21W
	Brookfield	Yellow Creek	Linn	NWNE	5	57N	19W
	Bucklin	Mussel Fork Creek	Macon	SWSW	7	57N	17W
	Butler	Marais De Cygnes	Bates	SWSE	4	39N	32W
	Butler	Miami Creek	Bates	SENE	24	40N	32W
	Cass Co. PWS #7	South Grand River	Cass	SESW	7	44N	32W
	Chillicothe	Grand River	Livingston	SWNW	13	57N	24W
	Clinton	South Grand River	Henry	SENE	7	41N	26W
	Dearborn	Bee Creek	Platte	SESW	36	55N	35W
	Fredericktown	Little St. Francis River	Madison	SESE	6	33N	7W
	Gower	Castile Creek	Clinton	SESW	10	55N	33W

PUBLIC WATER SUPPLY INTAKE LOCATIONS

NAME OF SUPPLY	NAME OF STREAM	COUNTY	1/4 SECTION	SECTION	TWP	RANGE	RIVER MILE
Jefferson Co. #2	Big River	Jefferson	SWNW	16	43N	4E	
Joplin	Shoal Creek	Newton	NENE	28	27N	33W	
Marceline	Mussel Fork Creek	Linn	NWSW	25	57N	18W	
Maryville	102 River	Nodaway	SWSW	15	64N	35W	
Neosho	Shoal Creek	Newton	SWSW	7	25N	31W	
New London	Salt River	Ralls	NWNW	5	55N	4W	
Paris	Middle Fork Salt River	Monroe	SWNE	10	54N	10W	
Perryville	Saline River	Perry	NESW	15	35N	10E	
Piedmont	Black River	Wayne	NWSE	9	28N	3E	
Plattsburg	Smithville Reservoir	Clinton	SESW	19	54N	33E	
Poplar Bluff	Black River	Butler	SWNW	2	24N	6E	
Ralls Co. PWS #1	Salt River	Ralls	SESE	30	56N	4W	
Ridgeway	Big Creek	Harrison	SWNE	32	65N	27W	
Rockville	Osage River	Bates	SESE	22	38N	29W	
Sedalia	Flat River	Pettis	NENW	22	45N	21W	
Shelbina	Salt River	Shelby	SWNE	17	57N	10W	
Smithville	Little Platte River	Clay	SESE	23	53N	33W	
Springfield	James River	Greene	NWNE	2	28N	21W	
Sweet Springs	Blackwater River	Saline	SESW	10	48N	23W	
Trenton	Thompson River	Grundy	NESW	18	61N	24W	
Wyaconda	Wyaconda River	Clark	NENW	28	65N	9W	

NEBRASKA SURFACE WATER SYSTEMS

1.	NE31 02502	BEAVER LAKE INC. RFD PLATSMOUTH, 68048	TROY WEATHERBY (402) 235-2241
2.	NE31 17905	BLAIR, CITY OF 218 S 16TH ST. BLAIR, 68008	WARREN D. WHITAKER (402) 426-4191
3.	NE31 20303	CEDAR-KNOX EWD P.O. BOX 518 HARTINGTON, 68739	JIM SHELTON (402) 254-6758
4.	NE31 04507	CHANDON, CITY OF P.O. BOX 390 CHANDON, 69337	LARRY TEAHON (308) 432-2815
5.	NE31 04505	CRAWFORD, CITY OF 209 ELM ST. CITY HALL CRAWFORD, 69339	JACQUE KREIDER (308) 665-1300
6.	NE31 05507	OMAHA, CITY OF MUD FLORENCE WATER PLANT 28th AND GREBE STREETS OMAHA, 68112	ZOLTAN KERESKES (402) 449-8180
7.	NE31 20425	OPPD NEBRASKA CITY STATION RR #3 NEBRASKA CITY, 68410	DALE WIDOE (402) 873-7731
8.	NE3 50099	US ARMY CORPS OF ENG. GAVINE PNT. DAM PROJ. OFF. P.O. BOX 710 YANKTON, 57078	JOHN GARTNER (402) 667-7873

APPENDIX A.3.b

MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

Revision 1
December, 1994

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

1. Missouri River Water Intakes

RIVER MILE	NAME	ACTIVITY OR EMERGENCY PHONE NUMBER
718.5	Iowa Public Service	(712) 277-7901/02
716.6	Iowa Public service	(712) 277-7966
648.4	City of Blair*	(402) 426-9661
646.0	Omaha Public Power (Fort Calhoun St.)	(402) 426-4011
626.3	Metropolitan Utilities District* Omaha, NE	(402) 449-8180
625.4	Omaha Public Power (N. Omaha)	(402) 536-4484
619.0	Council Bluffs Water Works* Council Bluffs, IA	(712) 328-9577 (712) 328-9587
615.3	Omaha Public Power (Jones St. Power Plant)	(402) 536-4515
606.0	Iowa Power and Light Co.	(712) 366-0563
556.0	Omaha Public Power District	(402) 873-4459
532.5	Nebraska Public Power District	(402) 825-6811
452.2	St. Joseph Water Co.*	(816) 233-8844
422.5	Atchison City Water Works*	(913) 367-3067
411.0 LB	Kansas City Power and Light Iatan, KS	(816) 386-5225
397.4	Leavenworth Water Department*	(913) 727-1902
379.9	Johnson County WD#1 Rural WD#2 (Stanley, KS)	(913) 722-3000 (913) 722-3000
373.6	KC Bnd of Public Utilities Drinking water Power Plant	(913) 573-9358 (913) 573-9190
370.5	Kansas City Water Department Dispatcher Lab Services/Treatment	(816) 274-1256 (816) 454-7600
336.7	Missouri Public Service - Wibley	(816) 249-6196
317.1	Missouri Water Company* Lexington, MO	(816) 259-2912 (816) 259-2761

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

1. Missouri River Water Intakes (continued)

RIVER MILE	NAME	ACTIVITY OR EMERGENCY PHONE NUMBER
306.5	Municipal Utilities of Higginsville Higginsville, Missouri (24 hours)	(816) 584-2106
226.9	LB City of Glasgow*, MO	(816) 338-2148 After hours: (816) 338-2111
196.9	Board of Public Works - Water Plant Boonville, MO	(816) 882-5131
144.1	Capital City Water Company* Jefferson City, MO. (24 hours):	(314) 636-8616
115.5	LB Callaway County Nuclear Plant (24 hours):	(314) 676-8234
37.1	St. Louis Water Div. (Howard Bend)*	(314) 469-1901
36.1	St. Louis County Water Co. (24 hours):	(314) 469-6050 (314) 991-3404
29.2	LB Old Railroad Water Intake	Water intake
20.5	RB County of St. Louis Water Works	(314) 991-3404

*Public Water Supplies

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

2. Mississippi River Public Water Intakes/Locks & Dams

RIVER MILE	NAME	LOCKS & DAMS	ACTIVITY OR EMERGENCY PHONE NUMBER
679.2	None	No. 8	(608) 689-2625
660	Interstate Power Co. Dubuque, IA		(319) 582-5421
647.9	None	No. 9	(608) 874-4311
640.5	Bruening Rock Products Decorah, IA		(319) 382-2933
615.1	None	No. 10	(319) 252-1261
586.5	Melo Sand and Gravel Dubuque, IA		(319) 557-7540
585	John Deere Dubuque Works Dubuque, IA		(319) 557-5151
583.0	None	No. 11	(319) 582-1204
581	Interstate Power Co. Dubuque, IA		(319) 582-5421
556.7	None	No. 12	(319) 872-3314
536	UMWR - U.S. F.W.S. Savanna District, Spring Lake		(815) 273-2732
522.5	None	NO. 13	(815) 589-3313
516	Archer Daniels Midland Co (slough) Clinton, IA		(319) 242-1121
514	Interstate Power Co. (slough) Dubuque, IA		(319) 582-5421
506.5	Commonwealth Edison Quad Cities Sta. East Moline, IL		(309) 654-2241
503	Iowa DNR Wildlife Bureau		(515) 281-5154
498	Moline Consumers Co. La Claire, IA		(319) 693-3161
493.5	None	No. 14	(309) 788-6366 (309) 788-6361
490.0	Davenport Water Co. Davenport, IA		(319) 322-0161

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

2. Mississippi River Public Water Intakes/Locks & Dams (continued)

RIVER MILE	NAME	LOCKS & DAMS	ACTIVITY OR EMERGENCY PHONE NUMBER
489.5	Aluminum Company of America Davenport, IA		(319) 359-2754
489.2	City of East Moline East Moline, IL		(309) 752-1519
485.7 (slough)	City of Moline Moline, IL		(309) 797-0489
485 (slough)	Harvester - Moline Moline, IL		(309) 765-7481
485 (slough)	IA-IL G&E - Moline Station Davenport, IA (5 intakes)		(319) 326-7175
484.2 (slough)	Rock Island Arsenal Rock Island, IL		(309) 782-1491
484	IA American Water Davenport, IA		(319) 324-3264
482.9 (slough)	City of Rock Island Rock Island, IL		(309) 793-6674
482.9	None	No. 15	(309) 788-6361 (309) 788-6365
468	Central Iowa Power Coop. Montpelier, IA		(319) 381-2062
457.2	None	No. 16	(309) 537-3191
454	Grain Processing Corp. Muscatine, IA		(319) 264-4695
453	Muscatine Power & Water Muscatine, IA		(319) 263-2631
437.1	None	No. 17	(309) 587-8125
426	Charles & Walter Gerst Oakville, IA		(319) 766-3285
420	James Anderson Madison, IA		(319) 937-6349
417 (slough)	Calvin Wirt Burlington, IA		(319) 937-6753
410.5	None	No. 18	(309) 873-2246

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

2. Mississippi River Public Water Intakes/Locks & Dams (continued)

RIVER MILE	NAME	LOCKS & DAMS	ACTIVITY OR EMERGENCY PHONE NUMBER
404.5	Burlington Water Co. Burlington, IA		(319) 752-7611
399.5	Iowa Southern Utilities Centerville, IA		(515) 437-4400
390.6	City of Dallas City Dallas City, IL		(217) 832-3224
389	William J. Pieper Waver, IA		(319) 372-4504
385.0	Ft. Madison Water Co. Ft. Madison, IA		(319) 372-1602 (319) 372-1623
378.5	Chavron Chemical Co. Fort Madison, IA		(319) 372-6012
375.8	City of Nauvoo Nauvoo, IL		(217) 453-2587
364.5	Union Electric Co. St. Louis		(314) 554-2637
364.3	Keokuk Water Co. Keokuk, IA		(319) 524-2011 (Let ring)
364.2	None	No. 19	(319) 524-2631
364	Union Electric-Keokuk Hydro Keokuk, IA		(319) 524-6620
363.5	Hubinger Co. Keokuk, IA		(319) 524-5757
359.8	City of Warsaw Warsaw, IL		(217) 256-4512
343.2	None	No. 20	(314) 288-3320
327	City of Quincy Quincy, IL		(217) 228-4580
324.9	None	No. 21	(217) 222-0918
307.0	Hannibal Water Dept. (filter plant) Hannibal, MO		(314) 221-0341 (314) 221-0123
301.2	None	No. 22	(314) 221-0294

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

2. Mississippi River-Public Water Intakes/Locks & Dams (continued)

RIVER MILE	NAME	LOCKS & DAMS	ACTIVITY OR EMERGENCY PHONE NUMBER
282.8	City of Louisiana Louisiana, MO		
273.4	None	No. 24	(314) 242-3524
245	Mark Twain Refuge-Batchtown Brussels, IL		(618) 883-2524
241.4	None	No. 25	(314) 668-8120
223.0	Louisiana Water Dept. Louisiana, MO		(314) 754-6912
220	Calhoun Point Grafton, IL		(618) 376-3303
204.1	IL American Water Co. Alton, IL		(618) 466-9470
202.9	None	No. 26	(618) 462-1713
200.9	(Replacement Lock and Dam Under Construction)	No. 26	
200	IL Power Wood River Station Decatur, IL		(217) 424-7376
200	Olin Corp. East Alton, IL		(618) 258-2975
192.2	IL American Water Co. Granite City Belleville, IL		(618) 236-1180
190.4	St. Louis Water Division St. Louis, MO(Chain of Rocks)		(314) 868-5640 (314) 868-5640
185	None	No. 27	(618) 452-7107
183	Union Electric Venice Station St. Louis, MO		(314) 554-2641
180.8	IL American Water Co. East St. Louis Belleville, IL		(618) 236-1180
140	Union Electric Rush Island Plant South of Crystal City, MO		

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

2. Mississippi River Public Water Intakes/Locks & Dams (continued)

RIVER MILE	NAME	LOCKS .. DAMS	ACTIVITY OR EMERGENCY PHONE NUMBER
109.9	Menard Correctional Center: Menard, IL		(618) 826-5071
109.5	City of Chester Chester, IL		(618) 826-3315
81	CIPS - Grand Tower Station (2 intakes) Springfield, IL		(618) 565-2481
54.3	Cape Girardeau Utilities Co. Cape Girardeau, MO		(314) 335-9145

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

3. Upper Mississippi River Mile Points of County Lines

MILEPOINT	STATE	COUNTY/COUNTY
673.8 L	MN/IA	Houston/Allamakee
667.6 R	VI	Vernon/Crawford
637.3 L	IA	Allamakee/Clayton
630.7 R	VI	Crawford/Grant
600.6 L	IA	Clayton/Dubuque
580.6 R	VI/IL	Grant/Jo Daviess
567.0 L	IA	Dubuque/Jackson
548.9 R	IL	Jo Daviess/Carroll
532.8 L	IA	Jackson/Clinton
524.7 R	IL	Carroll/Whiteside
511.5 R	IL	Whiteside/Rock Island
506.6 L	IA	Clinton/Scott
469.5 L	IA	Scott/Muscatine
448.8 L	IA	Muscatine/Louisa
448.8 R	IL	Rock Island/Marcer
425.6 L	IA	Louisa/Des Moines
425.5 R	IL	Marcer/Henderson
395.9 L	IA	Des Moines/Lee
390.6 R	IL	Henderson/Hancock
361.5 L	IA/MO	Lee/Clark
351.0 L	MO	Clark/Lewis
347.3 R	IL	Hancock/Adams
328.5 L	MO	Lewis/Marion
312.4 R	IL	Adams/Pike
306.1 L	MO	Marion/Ralls
297.4 L	MO	Ralls/Pike
275.4 R	IL	Pike/Calhoun
258.1 L	MO	Pike/Lincoln
236.4 L	MO	Lincoln/St. Charles
217.9 R	IL	Calhoun/Jersey
208.5 R	IL	Jersey/Madison
195.5 L	MO	St. Charles/St. Louis
182.3 R	IL	Madison/St. Clair
171.2 R	IL	St. Clair/Monroe
160.9 L	MO	St. Louis/Jefferson
139.3 L	MO	Jefferson/Sta. Genevieve
135.8 R	IL	Monroe/Randolph
117.0 L	MO	Sta. Genevieve/Perry
98.6 R	IL	Randolph/Jackson
79.4 R	IL	Jackson/Union
75.2 L	MO	Perry/Cape Girardeau
55.4 R	IL	Union/Alexander
47.8 L	MO	Cape Girardeau/Scott
25.9 L	MO	Mississippi/Scott

Note: R & L = Right and Left Ascending above Ohio River

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

4. Selected Tributaries to the Upper Mississippi River

TRIBUTARY NAME	ENTER TIME at Milapoint	STREAM Length (Miles)	DRAINAGE AREA (Square Miles)
Root River. MN	693.7 L		1,660
Bad Axe River. WI	675.2 R		170
Upper Iowa River. IA	671.1 L		1,600
Village Creek. IA	662.1 L		
Rush Creek. WI	659.4 R		52.5
Copper Creek. WI	655.3 R		27.7
DuCharme Creek. WI	644.3 R		12.4
Paint Creek. IA	640.7 L		42.8
Yellow River. IA	637.7 L		245.7
Wisconsin River. WI	631.7 R		11,700
Sny Magill Creek. IA	627.3 R		
Turkey River. IA	607.8 L		1,696
Grant River. WI	592.9 R		316
Platte River. WI	588.3 R		338
Little Maquoketa River. IA	586.3 L		156
Catfish Creek. IA	577.3 L		
Menominee River. IL	574.3 R	6.0	
Little Menominee River. IL	570.6 R	13.8	
Sinsinawa River. IL	568.9 R	13.8	49
Tete Du Mort Creek. IA	567.1 L		
Galena River. IL	564.9 R	13.0	203
Smallpox Creek. IL	563.2 R	15.8	
Maquoketa River. IA	548.6 L		1,903
Apple River. IL	545.2 R	55.0	262
Plum River. IL	536.7 R	44.7	299
Elk River. IA	528.4 L		
Heldt Ditch. IA	526.7 L		
Johnson Creek Diversion Ditch. IL	522.1 R	23.1	
Otter Creek. IA	521.3 R	10.8	
Rock Creek. IA	507.0 L		
Shaff Creek. IA	507.0 L		
Wapsipinicon River. IA	506.7 L		2,563
Duck Creek. IA	487.7 L		
Rock River. IL	479.1 R	162.3	10,915
Copperas Creek. IL	452.0 R	28.6	
Iowa River. IA	434.0 L		12,640
Edwards River. IL	431.3 R	75.4	451
Pope Creek. IL	428.0 R	58.9	200
Hawkeye Dolbee Diversion. IA	422.1 L		
Spring Creek Diversion Ditch. IA	410.3 L		
Henderson River Diversion Ditch. IL	409.9 R	67.7	604
Flinn River. IA	405.4 L		
Skunk River. IA	395.9 L		4,325
Devils Creek. IA	377.5 L		
Rileys Creek. IL	372.5 R		
Larry Creek. IL	369.2 R	9.5	
Chaney Creek. IL	364.8 R	11.6	

VI. MISSOURI AND MISSISSIPPI RIVER WATER INTAKES

4. Selected Tributaries to the Upper Mississippi River (continued)

TRIBUTARY NAME	ENTER UMR at Milepoint	STREAM Length (Miles)	DRAINAGE AREA (Square Miles)
Des Moines River. IA/MO	361.5 L		14,540
Fox River. MO	353.6 L		
Bear Creek. IL	341.0 R	43.1	
Vyaconda River. MO	337.3 L		
Rock & Urza Creek Diversion Ditch. IL	336.3 R		
Durgans Creek Diversion Ditch. MO	331.5 L		
Fabius River Diversion. MO	323.4 L		
North River. MO	321.1 L		
South River. MO	320.8 L		
Hill Creek. IL	318.2 R	22.8	
Handley-McCraney Diversion Channel. IL	296.7 R	4.5	74
Salt River. MO	284.3 L		2,230
Noix Creek. MO	282.2 L		
Buffalo Creek. MO	280.9 L		
Ramsay Creek. MO	265.5 L		
Bryants Creek Diversion Channel. MO	260.8 L		
Bobs Creek. MO	238.2 L		
Peruque Creek. MO	233.6 L		
Dardennes Creek. MO	227.4 L		
Illinois River. IL	217.5 R	273.0	28,906
Piassa Creek. IL	209.4 R	25.0	121
Wood River. IL	199.3 R	2.4	123
Missouri River. MO	195.6 L		
Cahokia Creek Diversion Channel. IL	195.0 R	51.7	263
Chain of Rocks Canal (North), IL	194.2 R		
Chain of Rocks Canal (South), IL	184.1 R		
Harding Ditch. IL	174.0 R	11.1	
River Des Peres Drainage Channel. MO	171.8 L		
Meramec River. MO	160.6 L		
Fountain Creek. IL	156.4 R	12.1	
Joachim Creek. MO	151.5 L		
Kaskaskia River. IL	117.6 R	295.1	5,801
Marys River. IL	106.4 R	44.1	243
Apple Creek. MO	75.1 L		
Indian Creek. MO	69.0 L		
Little River Diversion Channel. MO	48.8 L		
Cache River. IL	13.0 R	35.9	365

R = Right Ascending

L = Left Ascending

APPENDIX A.4

METROPOLITAN STATISTICAL AREAS (MSAs)

Revision 1
December, 1994

1990 CENSUS DATA

(POPULATIONS > 50,000)

MUNICIPAL STATISTICAL AREAS (MSA)

ST	MSA	Counties	Population
IA	Cedar Rapids	Linn	168,767
IA	Davenport-Moline-Rock Island	Scott-IA, Henry-IL, Rock Island-IL	350,861
IA	Des Moines	Dallas, Polk, Warren	392,928
IA	Dubuque	Dubuque	86,403
IA	Iowa City	Johnson	98,119
IA	Omaha (NE-IA)	Cass-NE, Douglas-NE, Sarpy-NE, Washington-NE, Pottawattamie-IA	618,262
IA	Sioux City (IA-NE)	Woodbury-IA, Dakota-NE	115,018
IA	Waterloo-Cedar Falls	Black Hawk	146,611
KS	Kansas City (MO-KS)	Cass-MO, Clay-MO, Clinton-MO, Jackson-MO, Lafayette-MO, Platte-MO, Ray-MO, Johnson-KS, Leavenworth-KS, Miami-KS, Wyandotte-KS	1,566,280
KS	Lawrence	Douglas	81,798
KS	Topeka	Shawnee	160,976
KS	Wichita	Butler, Harvey, Sedgwick	485,270
MO	Columbia	Boone	112,379
MO	Joplin	Jasper, Newton	134,910
MO	Kansas City (MO-KS)	Cass-MO, Clay-MO, Clinton-MO, Jackson-MO, Lafayette-MO, Platte-MO, Ray-MO, Johnson-KS, Leavenworth-KS, Miami-KS, Wyandotte-KS	1,566,280
MO	St. Joseph	Andrew, Buchanan	83,883
MO	St. Louis (MO-IL)	Crawford-MO, Sullivan City-MO, Franklin-MO, Jefferson-MO, Lincoln-MO, St. Charles-MO, St. Louis-MO, Warren-MO, St. Louis City-MO, Clinton-IL, Jersey-IL, Madison-IL, Monroe-IL, St. Clair-IL	2,444,099
MO	Springfield	Christian, Greene, Webster	240,593
NE	Lincoln	Lancaster	213,641
NE	Omaha (NE-IA)	Cass-NE, Douglas-NE, Sarpy-NE, Washington-NE, Pottawattamie-IA	618,262
NE	Sioux City (IA-NE)	Woodbury-IA, Dakota-NE	115,018

APPENDIX B

1. REGULATED FACILITIES

2. REGULATED PIPELINES

APPENDIX B.1

REGULATED FACILITIES

APPENDIX B: REGULATED FACILITIES

KANSAS

NAME: BOARD OF PUBLIC UTILITIES (QUINDARO)
LOCATION: 3601 N 12TH STREET
CITY/STATE: KANSAS CITY, KS 66104
PHONE: (913)537-9828
OPERATOR: JOHN MEINDERS
PHONE:
FAX:
ALTERNATE: MARYNELL HOLLENBECK
PHONE: (913)537-9828

XXXXX

NAME: CARGILL, INC. (MOLASSES LIQUID PRODUCTS DIVISION)
LOCATION: 10520 WALCOTT
CITY/STATE: KANSAS CITY, KS 66109
PHONE: (913)299-4334
OPERATOR: JOHN KORSCHGEN
PHONE:
FAX:
ALTERNATE: C. A. JONES
PHONE: (913)299-4334

XXXXX

NAME: CHASE TERMINAL COMPANY (GREAT BEND FACILITY)
LOCATION: RURAL ROUTE 289 HIGHWAY 156
CITY/STATE: GREAT BEND, KS 67530
PHONE: (316)792-4707
OPERATOR: GORDON HALTER
PHONE:
FAX:
ALTERNATE: PAUL HAASE
PHONE: (316)792-4707

XXXXX

NAME: CONOCO INC. (WICHITA PRODUCTS TERMINAL)
LOCATION: 8001 OAK KNOLL ROAD
CITY/STATE: WICHITA, KS 62707
PHONE: (316)681-2081
OPERATOR: SCOTT SALSBURY
PHONE:
FAX:
ALTERNATE: JERRY BOYD
PHONE: (316)681-3746

XXXXX

NAME: DEPARTMENT OF THE ARMY (SUNFLOWER AMMUNITION)
LOCATION: 35425 W 103rd STREET
CITY/STATE: DESOTO, KS 66018
PHONE: (913)791-6700
OPERATOR: J. L. BETTEKEN
PHONE:
FAX:
ALTERNATE: RONALD D. LEE
PHONE: (913)791-6755

XXXXX

NAME: ERNRON GAS PROCESSING CO. (BUSHTON PLANT)
LOCATION: ROUTE 1
CITY/STATE: BUSHTON, KS 67427
PHONE: (316)562-3287
OPERATOR: RON EHRHARDT
PHONE: (316)562-3287
FAX: (316)562-3278
ALTERNATE: ALLEN SIEMER
PHONE: (316)562-3287

XXXXX

NAME: FARMLAND INDUSTRIES (COFFEYVILLE REFINERY)
LOCATION: N LINDEN STREET
CITY/STATE: COFFEYVILLE, KS 67337
PHONE: (316)251-4000
OPERATOR: BOB DOUGLASS
PHONE: (316)251-3648
FAX:
ALTERNATE: REX HEATER
PHONE: (316)251-6054

XXXXX

NAME: FARMLAND INDUSTRIES (PHILLIPSBURG)
LOCATION: N HIGHWAY 183
CITY/STATE: PHILLIPSBURG, KS 67661
PHONE: (913)543-5246
OPERATOR: IVAN L. WAGNER
PHONE:
FAX:
ALTERNATE: LEROY BRAUN
PHONE: (913)543-5246

XXXXX

NAME: GOODYEAR TIRE & RUBBER COMPANY (TOPEKA)
LOCATION: 2000 NW HIGHWAY 24
CITY/STATE: TOPEKA, KS 66618
PHONE: (913)295-7343
OPERATOR: JOHN TRIMMER
PHONE:
FAX:
ALTERNATE: JIM HERRIGAN
PHONE: (913)295-7341

XXXXX

NAME: PHILLIPS PIPE LINE COMPANY (KANSAS CITY)
LOCATION: 2029 FAIRFAX TRAFFICWAY
CITY/STATE: KANSAS CITY, KS 66117
PHONE: (913)342-0510
OPERATOR: R. D. SMITH
PHONE:
FAX:
ALTERNATE: RICK MALLICOAT
PHONE: (913)342-0510

XXXXX

NAME: TEXACO REFINING & MARKETING, INC. (EL DORADO)
LOCATION: 1401 S DOUGLAS ROAD
CITY/STATE: EL DORADO, KS 67042
PHONE: (316)321-2200
OPERATOR: R. C. SHEFFIELD
PHONE:
FAX:
ALTERNATE: SAFETY SUPERVISOR
PHONE: (316)321-2200 EXT 256

XXXXX

NAME: TOTAL PETROLEUM, INC. (ARKANSAS CITY REFINERY)
LOCATION: 1400 SOUTH M STREET
CITY/STATE: ARKANSAS CITY, KS 67005
PHONE: (316)442-5100
OPERATOR: JACK MARTIN
PHONE:
FAX:
ALTERNATE: TIM D. SODOWSKY
PHONE: (316)442-6455 (HM)

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (TOPEKA)
LOCATION: 75 HIGHWAY SOUTH RFD 1
CITY/STATE: WAKARUSA, KS 66546
PHONE: (913)862-1661
OPERATOR: AMOS JONES
PHONE: (913)782-0462
FAX:
ALTERNATE: JIM GERLACH
PHONE: (913)281-2050

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (KC FAIRFAX WEST)
LOCATION: 1090 SUNSHINE ROAD
CITY/STATE: KANSAS CITY, KS 66115
PHONE: (913)321-2313
OPERATOR: TIM ELBERT
PHONE: (913)281-4804
FAX:
ALTERNATE: JIM GERLACH
PHONE: (913)281-2050

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (KANSAS CITY)
LOCATION: 401 E DONOVAN ROAD
CITY/STATE: KANSAS CITY, KS 66115
PHONE: (913)281-0771
OPERATOR: TIM ELBERT
PHONE: (913)281-4804
FAX:
ALTERNATE: JIM GERLACH
PHONE: (913)281-2050

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (ST. JOSEPH)
LOCATION: RT. 2 HIGHWAY 36
CITY/STATE: WATHENA, KS 66090
PHONE: (913)989-3448
OPERATOR: RICK GREGG
PHONE: (816)872-6417
FAX:
ALTERNATE: JIM GERLACH
PHONE: (913)281-2050

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (OLATHE)
LOCATION: 13745 W 135TH STREET
CITY/STATE: OLATHE, KS 66062
PHONE: (913)782-0462
OPERATOR: AMOS JONES
PHONE: (913)782-0462
FAX:
ALTERNATE: JIM GERLACH
PHONE: (913)281-2050

APPENDIX B: REGULATED FACILITIES

MISSOURI

NAME: AG PROCESSING, INC. (ST. JOSEPH)
LOCATION: 900 LOWER LAKE ROAD
CITY/STATE: ST. JOSEPH, MO 64504
PHONE: (816)238-1700
OPERATOR: DARYL SYBESMA
PHONE:
FAX:
ALTERNATE: TONY PREHM
PHONE: (816)238-1700

XXXXX

NAME: AMOCO OIL COMPANY (SUGAR CREEK TERMINAL)
LOCATION: 1000 N STERLING
CITY/STATE: SUGAR CREEK, MO 64054
PHONE: (816)836-6014
OPERATOR: LYNN TALCOTT
PHONE:
FAX:
ALTERNATE: VERONA BUCHELE
PHONE: (816)836-6013

XXXXX

NAME: AYERS OIL COMPANY (CANTON, MO TERMINAL)
LOCATION: 4TH & GRANT STREET
CITY/STATE: CANTON, MO 63435
PHONE: (314)288-4466
OPERATOR: TOM SMITH
PHONE:
FAX:
ALTERNATE: KEVIN CAIN
PHONE: (314)288-4466

XXXXX

NAME: BURLINGTON NORTHERN RAILROAD (SPRINGFIELD)
LOCATION: 3253 CHESTNUT EXPRESSWAY
CITY/STATE: SPRINGFIELD, MO 65802
PHONE: (417)864-2169
OPERATOR: NEIL CALTON
PHONE:
FAX:
ALTERNATE: TERMINAL SUPERVISOR
PHONE: (417)864-3100

XXXXX

NAME: CARGILL, INC. (KC SOYBEAN PROCESSING PLANT)
LOCATION: 2306 ROCHESTER AVENUE
CITY/STATE: KANSAS CITY, MO 64120
PHONE: (913)245-0531
OPERATOR: MICHAEL HOERLE
PHONE:
FAX:
ALTERNATE: DELBERT LONG
PHONE: (913)245-0533

XXXXX

NAME: CLARK OIL & REFINING CORPORATION (ST. LOUIS)
LOCATION: 4070 S FIRST STREET
CITY/STATE: ST. LOUIS, MO 63118
PHONE: (314)752-0144
OPERATOR: BILL DAVIS
PHONE:
FAX:
ALTERNATE: STAN BRAULT
PHONE: (314)752-0144

XXXXX

NAME: CONOCO INC. (RIVERSIDE PRODUCTS TERMINAL)
LOCATION: 6700 NW RIVERPARK DR P.O. BOX 14215
CITY/STATE: PARKVILLE, MO 64119
PHONE: (816)587-1442
OPERATOR: RANDY GREEN
PHONE:
FAX:
ALTERNATE: LANCE REVAS
PHONE: (816)587-1442

XXXXX

NAME: CONOCO INC. (ST. CHARLES PRODUCTS TERMINAL)
LOCATION: 4000 MUELLER ROAD
CITY/STATE: ST. CHARLES, MO 63301
PHONE: (314)946-9648
OPERATOR: DOYLE STRAIN
PHONE:
FAX:
ALTERNATE: TOM CLAIR
PHONE: (314)946-9648

XXXXX

NAME: ITAPCO (MISSOURI TERMINAL)
LOCATION: 1400 S GIBONEY
CITY/STATE: CAPE GIRARDEAU, MO 63701
PHONE: (314)335-6688
OPERATOR: DUSTIN COLLINS
PHONE: (314)339-9583 (HM)
FAX:
ALTERNATE: RICK CLARDY
PHONE: (314)833-6598 (HM)

XXXXX

NAME: J. D. STRETT & CO. INC. (1ST ST FACILITY)
LOCATION: 3800 S 1ST STREET
CITY/STATE: ST. LOUIS, MO 63118
PHONE: (314)351-6100
OPERATOR: BILL HOPKINS
PHONE:
FAX:
ALTERNATE: CHIP BAKER
PHONE: (314)351-6100

XXXXX

NAME: KANSAS CITY POWER & LIGHT (MONTROSE STATION)
LOCATION: RFD 4 (N SIDE OF MONTROSE LAKE)
CITY/STATE: CLINTON, MO 64735
PHONE: (816)885-2284
OPERATOR: JERRY T. ENGLAND
PHONE:
FAX:
ALTERNATE: OPERATIONS SUPERVISOR
PHONE:

XXXXX

NAME: KERR-MCGEE REFINING CORPORATION (ST. LOUIS)
LOCATION: 4000 KOCH STREET
CITY/STATE: ST. LOUIS, MO 63129
PHONE: (314)892-0300
OPERATOR: RONALD R. SIX
PHONE: (314)655-4707
FAX:
ALTERNATE: KEITH SCHILB
PHONE: (314)892-0300

XXXXX

NAME: KERR-MCGEE REFINING CORPORATION (LaGRANGE)
LOCATION: 905 N MAIN STREET
CITY/STATE: LaGRANGE, MO 63448
PHONE: (314)655-4707
OPERATOR: RONALD R. SIX
PHONE: (314)655-4707
FAX:
ALTERNATE: ALAN L. BROWN
PHONE: (314)655-4707

XXXXX

NAME: KOCH MATERIALS CO. (ELF ASPHALT)
LOCATION: 6350 KNOX INDUSTRIAL DRIVE
CITY/STATE: ST. LOUIS, MO 63139
PHONE: (314)781-6706
OPERATOR: JAMES E. HUMISTON
PHONE:
FAX:
ALTERNATE: KEITH ARMBRUSTER
PHONE: (314)781-6706

XXXXX

NAME: KOCH MATERIALS COMPANY (KANSAS CITY FACILITY)
LOCATION: 4915 CHELSEA
CITY/STATE: KANSAS CITY, MO 64130
PHONE: (816)924-1400
OPERATOR: JERRY BRYANT
PHONE: (816)537-6420 (HM)
FAX: (816)924-0462
ALTERNATE: KRAIG KINNAMON
PHONE: (816)537-8746 (HM)

XXXXX

NAME: KOCH MATERIALS COMPANY (NEW MADRID)
LOCATION: HIGHWAY 61 S
CITY/STATE: NEW MADRID, MO 63869
PHONE: (314)748-2587
OPERATOR: DARRYL G. DARNELL
PHONE: (314)748-2362 (HM)
FAX: (314)748-2600
ALTERNATE: JON HAMMOCK
PHONE: (314)748-2587

XXXXX

NAME: MISSOURI PUBLIC SERVICE (GREENWOOD EMERGENCY)
LOCATION: 14015 S SMART ROAD
CITY/STATE: GREENWOOD, MO 64034
PHONE: (816)537-6895
OPERATOR: MIKE JONAGAN
PHONE:
FAX:
ALTERNATE: AL DANCY
PHONE: (816)537-6895

XXXXX

NAME: PENNZOIL COMPANY (ST. LOUIS PACKAGING PLANT)
LOCATION: 2625 WAGNER PLACE
CITY/STATE: MARYLAND HEIGHTS, MO 63043
PHONE: (314)291-1300
OPERATOR: JACK ASH
PHONE:
FAX:
ALTERNATE: BOB BROWN
PHONE: (314)291-1300

XXXXX

NAME: PETROLEUM FUEL & TERMINAL COMPANY
LOCATION: FOOT OF MULLANPHY STREET
CITY/STATE: ST. LOUIS, MO 63102
PHONE: (314)621-0522
OPERATOR: RANDEL LEWIS
PHONE: (618)452-8160 (HM)
FAX:
ALTERNATE: DICK BLOCH
PHONE: (618)254-1607 (HM)

XXXXX

NAME: REIDY TERMINAL, INC.
LOCATION: 4528 S BROADWAY
- CITY/STATE: ST. LOUIS, MO 63111
PHONE: (314)481-8828
OPERATOR: JUSTIN BAKER
PHONE: (314)524-6287
FAX:
ALTERNATE: RON WUNDERLICH
PHONE: (314)355-7765

XXXXX

NAME: SHELL OIL COMPANY (ST. LOUIS PLANT)
LOCATION: 239 E PRAIRIE AVENUE
CITY/STATE: ST. LOUIS, MO 63147
PHONE: (314)231-2000
OPERATOR: LARRY PADFIELD
PHONE: (314)843-8794 (HM)
FAX:
ALTERNATE: PLANT SUPERVISOR
PHONE: (314)842-6067 (HM)

XXXXX

NAME: SINCLAIR (NEW MADRID TERMINAL)
LOCATION: 211 WATER STREET
CITY/STATE: NEW MADRID, MO 63689
PHONE: (314)748-2340
OPERATOR: RICHARD PLOESSL
PHONE:
FAX:
ALTERNATE: HAROLD BACKFISCH
PHONE: (314)748-2340

XXXXX

NAME: VALVOLINE, INC. (PACKAGING FACILITY)
LOCATION: 3536 S 1ST STREET
CITY/STATE: ST. LOUIS, MO 63118
PHONE:
OPERATOR: JOSEPH GALLAGHER
PHONE: (314)351-2741
FAX:
ALTERNATE: JOSEPH HUMPHREY
PHONE: (618)692-6907

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (COLUMBIA)
LOCATION: 63 HIGHWAY SOUTH
CITY/STATE: COLUMBIA, MO 65201
PHONE: (314)443-1619
OPERATOR: PAUL ROMINE
PHONE: (314)443-1610
FAX:
ALTERNATE: DALE BUTTERBAUGH
PHONE: (314)769-2792

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (PALMYRA)
LOCATION: RFD 1 (JUST OFF HWY 61/24)
CITY/STATE: PALMYRA, MO 63461
PHONE: (314)769-4802
OPERATOR: PAUL ROMINE
PHONE: (314)443-1610
FAX:
ALTERNATE: DALE BUTTERBAUGH
PHONE: (314)769-2792

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (SPRINGFIELD)
LOCATION: RR 2 COUNTY ROAD MM
CITY/STATE: BROOKLINE, MO 65619
PHONE: (417)865-3489
OPERATOR: C. L. LAWRENCE
PHONE: (417)394-2700
FAX:
ALTERNATE: MIKE ORR
PHONE: (316)365-5491

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (ST. CHARLES)
LOCATION: 4695 SERVICE ROAD
CITY/STATE: ST. PETERS, MO 63376
PHONE: (314)447-6535
OPERATOR: PAUL ROMINE
PHONE: (314)443-1610
FAX:
ALTERNATE: DALE BUTTERBAUGH
PHONE: (314)769-2792

APPENDIX B: REGULATED FACILITIES

IOWA

NAME: AG PROCESSING, INC. (SERGEANT BLUFF)
LOCATION: PORT NEAL ROAD
CITY/STATE: SERGEANT BLUFF, IA 51054
PHONE: (712)943-4282
OPERATOR: JEFF ROGERS
PHONE:
FAX:
ALTERNATE: HAROLD MANN
PHONE: (712)943-4282

XXXXX

NAME: AMOCO OIL COMPANY (BETTENDORF)
LOCATION: 75 31ST STREET
CITY/STATE: BETTENDORF, IA 52772
PHONE: (319)355-2686
OPERATOR: STEVE E. NOLL
PHONE:
FAX:
ALTERNATE: STEVE SPETH
PHONE: (319)355-2686

XXXXX

NAME: AMOCO OIL COMPANY (CEDAR RAPIDS)
LOCATION: 2092 HIGHWAY 965 NE
CITY/STATE: NORTH LIBERTY, IA 52317
PHONE: (319)626-2461
OPERATOR: MERLE PUHRMAN
PHONE: (319)626-2461
FAX:
ALTERNATE: P. L. McGOVERN
PHONE: (319)438-6461 (HM)

XXXXX

NAME: AMOCO OIL COMPANY (COUNCIL BLUFFS)
LOCATION: 829 E SOUTH OMAHA BRIDGE RD.
CITY/STATE: COUNCIL BLUFFS, IA 51502
PHONE: (712)366-9461
OPERATOR: NORM NEUERBURG
PHONE:
FAX:
ALTERNATE: GEORGE WEISS
PHONE: (712)366-9461

XXXXX

NAME: AMOCO OIL COMPANY (DAVENPORT)
LOCATION: HIGHWAY 22
CITY/STATE: DAVENPORT, IA 52804
PHONE: (319)324-5276
OPERATOR: JON WERNER
PHONE:
FAX:
ALTERNATE: GARY SEIBEL
PHONE: (319)324-5276

XXXXX

NAME: AMOCO OIL COMPANY (DES MOINES)
LOCATION: 1501 NW 86TH STREET
CITY/STATE: DES MOINES, IA 50325
PHONE: (515)226-4011
OPERATOR: JERRY L. LANDRY
PHONE:
FAX: (515)226-4025
ALTERNATE: J. D. SMITH
PHONE: (515)223-1395 (HM)

XXXXX

NAME: AMOCO OIL COMPANY (DUBUQUE)
LOCATION: HIGHWAY 416 (8 MILES W OF DUBUQUE)
CITY/STATE: DUBUQUE, IA 52001
PHONE: (319)583-6401
OPERATOR: JIM A. LABRICE
PHONE:
FAX:
ALTERNATE: W. R. VENTER
PHONE: (319)583-3960 (HM)

XXXXX

NAME: AMOCO OIL COMPANY (OTTUMWA)
LOCATION: RURAL ROUTE 4 (3 MILES W ON U.S. 34)
CITY/STATE: OTTUMWA, IA 52501
PHONE: (515)684-5456
OPERATOR: GARY W. CLARK
PHONE:
FAX:
ALTERNATE: DON WHEELER
PHONE:

XXXXX

NAME: CARGILL, INC. (CEDAR RAPIDS SOYBEAN PLANT)
LOCATION: 411 SIXTH STREET NE
CITY/STATE: CEDAR RAPIDS, IA 52402
PHONE: (319)399-4050
OPERATOR: JOE PEANASKY
PHONE: (319)399-4048
FAX:
ALTERNATE: ROB BOARDMAN
PHONE: (319)377-8910

XXXXX

NAME: CARGILL, INC. (DES MOINES SOYBEAN PLANT)
LOCATION: 3030 E GRANGER AVENUE
CITY/STATE: DES MOINES, IA 50306
PHONE: (515)263-3100
OPERATOR: GREG LOFSTEDT
PHONE:
FAX: (515)263-3117
ALTERNATE: JUSTIN FRIESS
PHONE: (515)225-3121

XXXXX

NAME: CARGILL, INC. (MOLASSES LIQUID PRODUCTS DIVISION)
LOCATION: HIGHWAY 22 W
CITY/STATE: BUFFALO, IA 52728
PHONE: (319)381-2210
OPERATOR: ROBERT METTLER
PHONE:
FAX:
ALTERNATE: A. PEEK
PHONE: (319)381-2210

XXXXX

NAME: CONOCO INC. (DES MOINES)
LOCATION: 4500 VANDALIA ROAD
CITY/STATE: PLEASANT HILL, IA 50317
PHONE: (515)262-5454
OPERATOR: BRETT BOWMAN
PHONE: (515)964-2611
FAX:
ALTERNATE: KELLY McMILLIAN
PHONE: (515)262-8292

XXXXX

NAME: KOCH MATERIALS COMPANY (BETTENDORF)
LOCATION: 4100 ELM STREET
CITY/STATE: BETTENDORF, IA 52722
PHONE: (319)324-3766
OPERATOR: RICH SHERMAN
PHONE: (319)359-1304
FAX:
ALTERNATE: ALLEN TWIST
PHONE: (319)324-3766

XXXXX

NAME: KOCH MATERIALS COMPANY (COUNCIL BLUFFS)
LOCATION: 2200 RIVER ROAD
CITY/STATE: COUNCIL BLUFFS, IA 51501
PHONE: (712)323-3223
OPERATOR: RICHARD TIMMERMEYER
PHONE: (402)341-8737
FAX: (712)323-0431
ALTERNATE: STEVE WELCHERT
PHONE: (402)341-8737

XXXXX

NAME: KOCH MATERIALS COMPANY (DAVENPORT)
LOCATION: RT. 2 HIGHWAY 22 W
CITY/STATE: DAVENPORT, IA 52804
PHONE: (319)324-3766
OPERATOR: RICK SHERMAN
PHONE: (319)359-1304
FAX:
ALTERNATE: ALLEN TWIST
PHONE: (319)324-3766

XXXXX

NAME: KOCH MATERIALS COMPANY (DUBUQUE #1)
LOCATION: TWELFTH STREET EXTENSION
CITY/STATE: DUBUQUE, IA 52001
PHONE: (319)556-1304
OPERATOR: ALAN BERNHAGEN
PHONE:
FAX:
ALTERNATE: DAN GANTENBEIN
PHONE: (319)556-1304

XXXXX

NAME: KOCH MATERIALS COMPANY (DUBUQUE #2)
LOCATION: 200 TERMINAL STREET
CITY/STATE: DUBUQUE, IA 52001
PHONE: (319)556-1304
OPERATOR: ALAN BERNHAGEN
PHONE: (319)556-1304
FAX:
ALTERNATE: DAN GANTENBEIN
PHONE: (319)556-1304

XXXXX

NAME: KOCH MATERIALS COMPANY (ELF ASPHALT)
LOCATION: 900 E RACCOON
CITY/STATE: DES MOINES, IA 50309
PHONE: (515)288-1076
OPERATOR: JEFF DYKSTRA
PHONE:
FAX:
ALTERNATE: ROBERT BRAZIE
PHONE: (515)848-3817

XXXXX

NAME: PHILLIPS PIPE LINE COMPANY (BETTENDORF)
LOCATION: 139 33rd STREET
CITY/STATE: BETTENDORF, IA 53722
PHONE: (319)355-2654
OPERATOR: GARY PIERSALL
PHONE:
FAX:
ALTERNATE: JERRY PARROTT
PHONE: (319)355-2654

XXXXX

NAME: SINCLAIR (FT. MADISON)
LOCATION: 2010 35th STREET
CITY/STATE: FT. MADISON, IA 52627
PHONE: (319)372-6552
OPERATOR: RICK HUFF
PHONE:
FAX:
ALTERNATE: KEVIN SCHNEIDER
PHONE: (319)372-6552

XXXXX

NAME: THE UNO-VEN COMPANY (BETTENDORF)
LOCATION: 312 S BELLINGHAM STREET
CITY/STATE: RIVERDALE, IA 52722
PHONE: (319)355-2931
OPERATOR: THOMAS L. JONES
PHONE:
FAX:
ALTERNATE: C. W. HARMON
PHONE: (708)818-7254

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (DES MOINES)
LOCATION: 2503 SE 43rd STREET
CITY/STATE: DES MOINES, IA 50317
PHONE: (515)262-5648
OPERATOR: JOHN RILEY
PHONE: (515)262-5648
FAX:
ALTERNATE: GREG TARR
PHONE: (515)265-3262

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (FT DODGE)
LOCATION: RR2 HIGHWAY 20
CITY/STATE: DUNCOMBE, IA 50532
PHONE: (515)543-4563
OPERATOR: JOHN RILEY
PHONE: (515)262-5648
FAX:
ALTERNATE: GREG TARR
PHONE: (515)265-3262

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (IOWA TERMINAL)
LOCATION: 912 FIRST AVENUE
CITY/STATE: CORALVILLE, IA 52241
PHONE: (319)354-3976
OPERATOR: JOHN MARTIN
PHONE: (319)354-3976
FAX:
ALTERNATE: JEFF BENGE
PHONE: (816)284-2077

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (MILFORD)
LOCATION: RR 1 HIGHWAY 71
CITY/STATE: MILFORD, IA 51351
PHONE: (712)338-2241
OPERATOR: LORETTA BROBERG
PHONE: (712)239-2533
FAX:
ALTERNATE: BRAD SANDY
PHONE: (402)571-7080

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (SIOUX CITY)
LOCATION: 4300 41st STREET
CITY/STATE: SIOUX CITY, IA 51108
PHONE: (712)239-2533
OPERATOR: LORETTA BROBERG
PHONE: (712)239-2533
FAX:
ALTERNATE: BRAD SANDY
PHONE: (402)571-7080

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (WATERLOO)
LOCATION: 5360 ELDORA ROAD
CITY/STATE: WATERLOO, IA 50701
PHONE: (319)988-3269
OPERATOR: PAT SKINNER
PHONE: (319)988-3269
FAX:
ALTERNATE: GREG TARR
PHONE: (515)265-3262

APPENDIX B: REGULATED FACILITIES

NEBRASKA

NAME: BURLINGTON NORTHERN RAILROAD (ALLIANCE)
LOCATION: 111 W FIRST STREET
CITY/STATE: ALLIANCE, NE 69301
PHONE: (308)762-6000
OPERATOR: TERMINAL SUPERINTENDENT
PHONE: (308)271-2257
FAX:
ALTERNATE: OPERATOR
PHONE: (308)762-6000

XXXXX

NAME: BURLINGTON NORTHERN RAILROAD (LINCOLN)
LOCATION: 801 WEST O STREET
CITY/STATE: LINCOLN, NE 68528
PHONE: (402)473-7700
OPERATOR: WAYNE PORTER
PHONE: (402)473-7595
FAX:
ALTERNATE: SECONDARY COORDINATOR
PHONE: (402)473-7633

XXXXX

NAME: CENTRAL NEBRASKA PUBLIC POWER (CANADAY STEAM)
LOCATION: ROUTE 2
CITY/STATE: LEXINGTON, NE 68850
PHONE: (308)324-4581
OPERATOR: WILLIAM O. MONTER
PHONE:
FAX:
ALTERNATE: ERIC HIXSON
PHONE: (308)995-8601

XXXXX

NAME: CONOCO INC. (LINCOLN PRODUCTS TERMINAL)
LOCATION: ROUTE 1 FOURTEENTH & SUITILLO RD
CITY/STATE: ROCA, NE 68430
PHONE: (402)423-6111
OPERATOR: VIC HANNAN
PHONE: (402)423-8839
FAX:
ALTERNATE: TODD FUSKA
PHONE: (402)423-6111

XXXXX

NAME: CONOCO INC. (NORTH PLATTE)
LOCATION: W HIGHWAY 1
CITY/STATE: NORTH PLATTE, NE 69101
PHONE: (308)532-9533
OPERATOR: GENE SIEMERS
PHONE:
FAX:
ALTERNATE: DALE CHILDS
PHONE: (308)532-9533

XXXXX

NAME: CONOCO INC. (SIDNEY)
LOCATION: ROUTE 1 E HIGHWAY 30
CITY/STATE: SIDNEY, NE 69162
PHONE: (308)254-3510
OPERATOR: VINCE CALAHAN
PHONE: (308)254-3665 (HM)
FAX:
ALTERNATE: EVAN RIDDLE
PHONE: (308)254-2518 (HM)

XXXXX

NAME: UNION PACIFIC RAILROAD COMPANY (BAILEY YARD)
LOCATION: 4601 W FRONT STREET
CITY/STATE: NORTH PLATTE, NE 69101
PHONE:
OPERATOR:
PHONE:
FAX:
ALTERNATE: KENNETH R. WELCH
PHONE: (402)271-5767

XXXXX

NAME: WILLIAMS PIPE LINE COMPANY (OMAHA)
LOCATION: 2205 N ELEVENTH STREET
CITY/STATE: OMAHA, NE 68110
PHONE: (402)342-5476
OPERATOR: ALAN PAUL
PHONE: (402)342-5476
FAX:
ALTERNATE: BRAD SANDY
PHONE: (402)571-7080

APPENDIX B.2

REGULATED PIPELINES

Appendix B.2 gives a listing, provided by the Office of Pipeline Safety (OPS), of the current regulated pipelines that have been reviewed by OPS. Once the remaining regulated pipelines in Region VII have been reviewed, an updated version of this listing will be incorporated.

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
80	National Cooperative	NCRA ZONE 2	IA Mills	1350
80	National Cooperative	NCRA ZONE 2	IA Council Bluffs	1350
80	National Cooperative	NCRA ZONE 2	IA Pottawatomie	1350
80	National Cooperative	NCRA ZONE 2	IA Douglas	1350
392	Norco Pipeline, Inc.	MAZON AREA	IA LEE	3650
503	Kaneb Pipe Line Company	KANEB ZONE 4	IA CLAY	628
503	Kaneb Pipe Line Company	KANEB ZONE 4	IA DICKINSON	628
503	Kaneb Pipe Line Company	KANEB ZONE 4	IA LYON	628
503	Kaneb Pipe Line Company	KANEB ZONE 4	IA O'BRIEN	628
503	Kaneb Pipe Line Company	KANEB ZONE 4	IA PLYMOUTH	628
503	Kaneb Pipe Line Company	KANEB ZONE 4	IA SOUX	628
564	Williams Pipe Line	OMAHA ZONE	IA WASHINGTON	9195
564	Williams Pipe Line	OMAHA ZONE	IA MONONA	9195
565	Williams Pipe Line	DES MOINES ZONE	IA UNION	4696
565	Williams Pipe Line	DES MOINES ZONE	IA TAMA	4696
566	Williams Pipe Line	DIXON ZONE	IA SCOTT	6054
566	Williams Pipe Line	DIXON ZONE	IA JOHNSON	6054
567	Williams Pipe Line	MINNEAPOLIS ZONE	IA WORTH	2916
673	ENRON	ZONE G	IA FREMONT	5774
673	ENRON	ZONE G	IA MILLS	5774
674	ENRON	ZONE H	IA MILLS	6923
674	ENRON	ZONE H	IA MONTGOMERY	6923
676	ENRON	ZONE J	IA MONTGOMERY	5774
676	ENRON	ZONE J	IA POTTAWATOMIE	5774
677	ENRON	ZONE K	IA CASS	5965
677	ENRON	ZONE K	IA ADAIR	5965
677	ENRON	ZONE K	IA MADISON	5965
678	ENRON	ZONE L	IA MADISON	5199

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
678	ENRON	ZONE L	IA WARREN	5199
678	ENRON	ZONE L	IA POLK	5199
679	ENRON	ZONE M	IA POLK	8921
679	ENRON	ZONE M	IA JASPER	8921
680	ENRON	ZONE N	IA JASPER	11837
680	ENRON	ZONE N	IA POWESHIEK	11837
681	ENRON	ZONE O	IA POWESHIEK	10709
681	ENRON	ZONE O	IA IOWA	10709
682	ENRON	ZONE P	IA IOWA	7711
682	ENRON	ZONE P	IA JOHNSON	7711
683	ENRON	ZONE Q	IA CEDAR	8724
683	ENRON	ZONE Q	IA SCOTT	8724
683	ENRON	ZONE Q	IA MUSCATINE	8724
684	ENRON	ZONE R	IA CEDAR	8356
684	ENRON	ZONE R	IA SCOTT	8356
684	ENRON	ZONE R	IA MUSCATINE	8356
685	ENRON	ZONE S	IA SCOTT	7584
830	Arco Pipeline Company	HOUSTON-FORT MADISON	IA LEE	2300
855	Amoco	CHICAGO AREA	IA LEE	165000
859	Amoco	KANSAS AREA	IA ADAMS	86500
859	Amoco	KANSAS AREA	IA APPANOOSE	86500
859	Amoco	KANSAS AREA	IA DALLAS	86500
859	Amoco	KANSAS AREA	IA DAVIS	86500
859	Amoco	KANSAS AREA	IA DUBUQUE	86500
859	Amoco	KANSAS AREA	IA FREMONT	86500
859	Amoco	KANSAS AREA	IA HARRISON	86500
859	Amoco	KANSAS AREA	IA IOWA	86500
859	Amoco	KANSAS AREA	IA JOHNSON	86500

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
859	Amoco	KANSAS AREA	IA JONES	86500
859	Amoco	KANSAS AREA	IA KEOKUK	86500
859	Amoco	KANSAS AREA	IA LEE	86500
859	Amoco	KANSAS AREA	IA LINN	86500
859	Amoco	KANSAS AREA	IA MADISON	86500
859	Amoco	KANSAS AREA	IA MILLS	86500
859	Amoco	KANSAS AREA	IA MONONA	86500
859	Amoco	KANSAS AREA	IA PAGE	86500
859	Amoco	KANSAS AREA	IA PLYMOUTH	86500
859	Amoco	KANSAS AREA	IA POLK	86500
859	Amoco	KANSAS AREA	IA POTTAWATTAMIE	86500
859	Amoco	KANSAS AREA	IA SIOUX	86500
859	Amoco	KANSAS AREA	IA TAYLOR	86500
859	Amoco	KANSAS AREA	IA UNION	86500
859	Amoco	KANSAS AREA	IA WAPELLO	86500
859	Amoco	KANSAS AREA	IA WASHINGTON	86500
859	Amoco	KANSAS AREA	IA WOODBURY	86500
862	Amoco	TWIN CITIES AREA	IA CLAYTON	53500
862	Amoco	TWIN CITIES AREA	IA DELAWARE	53500
862	Amoco	TWIN CITIES AREA	IA DUBUQUE	53500
862	Amoco	TWIN CITIES AREA	IA FAYETTE	53500
862	Amoco	TWIN CITIES AREA	IA HOWARD	53500
862	Amoco	TWIN CITIES AREA	IA WINNESHIEK	53500
8	Kinley Corporation	CAPEHART TERMINAL	IA POTTAWATTAMIE	0
622	Koch Pipeline, Inc.	COTTAGE GROVE	IA Worth	17000
622	Koch Pipeline, Inc.	COTTAGE GROVE	IA Cerro Gordo	17000
623	Koch Pipeline, Inc.	BETHANY 4	IA Cerro Gordo	9500
623	Koch Pipeline, Inc.	BETHANY 4	IA Franklin	9500

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
623	Koch Pipeline, Inc.	BETHANY 4	IA Hamilton	9500
623	Koch Pipeline, Inc.	BETHANY 4	IA Hardin	9500
623	Koch Pipeline, Inc.	BETHANY 4	IA Story	9500
623	Koch Pipeline, Inc.	BETHANY 4	IA Polk	9500
623	Koch Pipeline, Inc.	BETHANY 4	IA Warren	9500
623	Koch Pipeline, Inc.	BETHANY 4	IA Clarke	9500
623	Koch Pipeline, Inc.	BETHANY 4	IA Decatur	9500
21	Mid-America Pipeline	KANSAS-OKLAHOMA	KS MONTGOMERY	5000
21	Mid-America Pipeline	COFFEYVILLE/EL	KS Chautauqua	5000
21	Mid-America Pipeline	COFFEYVILLE/EL	KS Cowley	5000
21	Mid-America Pipeline	COFFEYVILLE/EL	KS Butler	5000
27	Koch Gathering System,	ZONE 2	KS Greenwood	4550
	Koch Gathering System,	ZONE 2	KS Sumner	4550
30	Koch Gathering System,	ZONE 5	KS Clark	3200
53	Coastal Corporation	WRIGHT STATION	KS Sedgwick	8820
53	Coastal Corporation	WRIGHT STATION	KS Butler	8820
53	Coastal Corporation	WRIGHT STATION	KS Sumner	8820
66	Jayhawk Pipeline Company	AUGUSTA	KS Harvey	1075
66	Jayhawk Pipeline Company	AUGUSTA	KS McPherson	1075
66	Jayhawk Pipeline Company	AUGUSTA	KS Sedgwick	1075
66	Jayhawk Pipeline Company	AUGUSTA	KS Butler	1075
66	Jayhawk Pipeline Company	AUGUSTA	KS Greenwood	1075
66	Jayhawk Pipeline Company	AUGUSTA	KS Cowley	1075
66	Jayhawk Pipeline Company	AUGUSTA	KS Sumner	1075
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Osborne	1750
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Russell	1750
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Barton	1750
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Ellsworth	1750

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Rice	1750
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS McPherson	1750
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Reno	1750
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Stafford	1750
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Pratt	1750
67	Jayhawk Pipeline Company	CHASE DISTRICT	KS Kiowa	1750
68	Jayhawk Pipeline Company	LIBERAL DISTRICT	KS Finney	0
68	Jayhawk Pipeline Company	LIBERAL DISTRICT	KS Haskell	0
68	Jayhawk Pipeline Company	LIBERAL DISTRICT	KS Morton	0
68	Jayhawk Pipeline Company	LIBERAL DISTRICT	KS Stevens	0
68	Jayhawk Pipeline Company	LIBERAL DISTRICT	KS Seward	0
68	Jayhawk Pipeline Company	LIBERAL DISTRICT	KS Meade	0
	Jayhawk Pipeline Company	LIBERAL DISTRICT	KS Clark	0
79	National Cooperative	NCRA ZONE 1	KS McPherson	930
79	National Cooperative	NCRA ZONE 1	KS Saline	930
79	National Cooperative	NCRA ZONE 1	KS Dickinson	930
79	National Cooperative	NCRA ZONE 1	KS Abilene	930
79	National Cooperative	NCRA ZONE 1	KS Clay	930
79	National Cooperative	NCRA ZONE 1	KS Riley	930
79	National Cooperative	NCRA ZONE 1	KS Marshall	930
79	National Cooperative	NCRA ZONE 1	KS Blue Rapids	930
240	Texaco Trading &	KANSAS OPERATING	KS Butler	15355
240	Texaco Trading &	KANSAS OPERATING	KS Marion	15355
240	Texaco Trading &	KANSAS OPERATING	KS Cowley	15355
240	Texaco Trading &	KANSAS OPERATING	KS Harvey	15355
240	Texaco Trading &	KANSAS OPERATING	KS McPherson	15355
240	Texaco Trading &	KANSAS OPERATING	KS Sedgwick	15355
240	Texaco Trading &	KANSAS OPERATING	KS Allen	15355

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
240	Texaco Trading &	KANSAS OPERATING	KS Bourbon	15355
240	Texaco Trading &	KANSAS OPERATING	KS Greenwood	15355
240	Texaco Trading &	KANSAS OPERATING	KS Woodson	15355
240	Texaco Trading &	KANSAS OPERATING	KS Coffey	15355
240	Texaco Trading &	KANSAS OPERATING	KS Anderson	15355
240	Texaco Trading &	KANSAS OPERATING	KS Franklin	15355
240	Texaco Trading &	KANSAS OPERATING	KS Johnson	15355
240	Texaco Trading &	KANSAS OPERATING	KS Wyandotte	15355
240	Texaco Trading &	KANSAS OPERATING	KS Ness	15355
240	Texaco Trading &	KANSAS OPERATING	KS Hodgeman	15355
240	Texaco Trading &	KANSAS OPERATING	KS Rush	15355
240	Texaco Trading &	KANSAS OPERATING	KS Pawnee	15355
240	Texaco Trading &	KANSAS OPERATING	KS Stafford	15355
240	Texaco Trading &	KANSAS OPERATING	KS Rice	15355
240	Texaco Trading &	KANSAS OPERATING	KS Pratt	15355
240	Texaco Trading &	KANSAS OPERATING	KS Kingman	15355
240	Texaco Trading &	KANSAS OPERATING	KS Harper	15355
240	Texaco Trading &	KANSAS OPERATING	KS Barber	15355
240	Texaco Trading &	KANSAS OPERATING	KS Reno	15355
240	Texaco Trading &	KANSAS OPERATING	KS Lyons	15355
241	Texaco Trading &	KAW DISTRICT	KS Barton	10623
241	Texaco Trading &	KAW DISTRICT	KS Ellis	10623
241	Texaco Trading &	KAW DISTRICT	KS Ellsworth	10623
241	Texaco Trading &	KAW DISTRICT	KS Ness	10623
241	Texaco Trading &	KAW DISTRICT	KS Norton	10623
241	Texaco Trading &	KAW DISTRICT	KS Phillips	10623
241	Texaco Trading &	KAW DISTRICT	KS Rice	10623
241	Texaco Trading &	KAW DISTRICT	KS Rooks	10623

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
241	Texaco Trading &	KAW DISTRICT	KS Rush	10623
241	Texaco Trading &	KAW DISTRICT	KS Russell	10623
241	Texaco Trading &	KAW DISTRICT	KS Trego	10623
500	Kanab Pipe Line Company	KANEB ZONE 1	KS BUTLER	1951
500	Kanab Pipe Line Company	KANEB ZONE 1	KS COWLEY	1951
500	Kanab Pipe Line Company	KANEB ZONE 1	KS HARVEY	1951
500	Kanab Pipe Line Company	KANEB ZONE 1	KS McPHERSON	1951
500	Kanab Pipe Line Company	KANEB ZONE 1	KS RENO	1951
500	Kanab Pipe Line Company	KANEB ZONE 1	KS SEDGWICK	1951
501	Kanab Pipe Line Company	KANEB ZONE 2	KS CLOUD	1951
501	Kanab Pipe Line Company	KANEB ZONE 2	KS McPHERSON	1951
501	Kanab Pipe Line Company	KANEB ZONE 2	KS OTTAWA	1951
501	Kanab Pipe Line Company	KANEB ZONE 2	KS PHILLIPS	1951
501	Kanab Pipe Line Company	KANEB ZONE 2	KS REPUBLIC	1951
501	Kanab Pipe Line Company	KANEB ZONE 2	KS SALINE	1951
501	Kanab Pipe Line Company	KANEB ZONE 2	KS SMITH	1951
549	Conoco Pipe Line Company	PONCA CITY-ARKANSAS	KS COWLEY	14252
550	Conoco Pipe Line Company	WICHITA, KANSAS	KS SUMNER	8315
550	Conoco Pipe Line Company	WICHITA, KANSAS	KS COWLEY	8315
550	Conoco Pipe Line Company	WICHITA, KANSAS	KS SEDGWICK	8315
550	Conoco Pipe Line Company	WICHITA, KANSAS	KS BUTLER	8315
561	Williams Pipe Line	IOLA ZONE	KS GREENWOOD	9548
561	Williams Pipe Line	IOLA ZONE	KS WOODSON	9548
561	Williams Pipe Line	IOLA ZONE	KS OSAGE	9548
561	Williams Pipe Line	IOLA ZONE	KS MONTGOMERY	9548
561	Williams Pipe Line	IOLA ZONE	KS BUTLER	9548
562	Williams Pipe Line	KANSAS CITY ZONE	KS DONIPHAN	6100
562	Williams Pipe Line	KANSAS CITY ZONE	KS SHAWNEE	6100

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
562	Williams Pipe Line	KANSAS CITY ZONE	KS DOUGLAS	6100
562	Williams Pipe Line	KANSAS CITY ZONE	KS WYANDOTTE	6100
562	Williams Pipe Line	KANSAS CITY ZONE	KS BROWN	6100
667	ENRON	ZONE A	KS ELLSWORTH	6349
667	ENRON	ZONE A	KS LINCOLN	6349
667	ENRON	ZONE A	KS SALINE	6349
668	ENRON	ZONE B	KS OTTAWA	5734
668	ENRON	ZONE B	KS CLOUD	5734
669	ENRON	ZONE C	KS CLOUD	6349
669	ENRON	ZONE C	KS CLAY	6349
669	ENRON	ZONE C	KS WASHINGTON	6349
670	ENRON	ZONE D	KS WASHINGTON	7499
688	ENRON	ZONE AA	KS ELLSWORTH	5015
693	ENRON	ZONE AA	KS RICE	5015
693	ENRON	ZONE AA	KS RENO	5015
694	ENRON	ZONE BB	KS McPHERSON	4349
695	ENRON	ZONE CC	KS ELLSWORTH	5015
695	ENRON	ZONE CC	KS RICE	5015
695	ENRON	ZONE CC	KS McPHERSON	5015
696	ENRON	ZONE DD	KS ELLSWORTH	9446
696	ENRON	ZONE DD	KS McPHERSON	9446
696	ENRON	ZONE DD	KS SALINE	9446
696	ENRON	ZONE DD	KS DICKINSON	9446
697	ENRON	ZONE EE	KS DICKINSON	9446
697	ENRON	ZONE EE	KS GEARY	9446
697	ENRON	ZONE EE	KS WABUNSEE	9446
697	ENRON	ZONE EE	KS POTTAWATOMIE	9446
697	ENRON	ZONE EE	KS SHAWNEE	9446

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
697	ENRON	ZONE EE	KS JACKSON	9446
698	ENRON	ZONE FF	KS JACKSON	8212
698	ENRON	ZONE FF	KS JEFFERSON	8212
698	ENRON	ZONE FF	KS ATCHISON	8212
830	Arco Pipeline Company	HOUSTON-FORT MADISON	KS MONTGOMERY	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	KS WILSON	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	KS NEOSHO	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	KS ALLEN	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	KS ANDERSON	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	KS FRANKLIN	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	KS MIAMI	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	KS JOHNSON	2300
8	Arco Pipeline Company	HOUSTON-FORT MADISON	KS WYANDOTTE	2300
856	Amoco	CUSHING AREA	KS ALLEN	246500
856	Amoco	CUSHING AREA	KS ANDERSON	246500
856	Amoco	CUSHING AREA	KS BOURBON	246500
856	Amoco	CUSHING AREA	KS CHAUTAUQUA	246500
856	Amoco	CUSHING AREA	KS LINN	246500
856	Amoco	CUSHING AREA	KS MONTGOMERY	246500
856	Amoco	CUSHING AREA	KS NEOSHO	246500
856	Amoco	CUSHING AREA	KS WILSON	246500
857	Amoco	DENVER AREA	KS BARTON	75000
857	Amoco	DENVER AREA	KS DECATUR	75000
857	Amoco	DENVER AREA	KS DICKINSON	75000
857	Amoco	DENVER AREA	KS ELLIS	75000
857	Amoco	DENVER AREA	KS ELLSWORTH	75000
857	Amoco	DENVER AREA	KS FRANKLIN	75000
857	Amoco	DENVER AREA	KS GEARY	75000

12/08/93

Seq #	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
857	Amoco	DENVER AREA	KS GOVE	75000
857	Amoco	DENVER AREA	KS GRAHAM	75000
857	Amoco	DENVER AREA	KS LINCOLN	75000
857	Amoco	DENVER AREA	KS LOGAN	75000
857	Amoco	DENVER AREA	KS LYON	75000
857	Amoco	DENVER AREA	KS MIAMI	75000
857	Amoco	DENVER AREA	KS MORRIS	75000
857	Amoco	DENVER AREA	KS NORTON	75000
857	Amoco	DENVER AREA	KS OSAGE	75000
857	Amoco	DENVER AREA	KS OSBORNE	75000
857	Amoco	DENVER AREA	KS OTTAWA	75000
857	Amoco	DENVER AREA	KS RAWLINS	75000
857	Amoco	DENVER AREA	KS ROOKS	75000
857	Amoco	DENVER AREA	KS RUSSELL	75000
857	Amoco	DENVER AREA	KS SHERMAN	75000
857	Amoco	DENVER AREA	KS THOMAS	75000
857	Amoco	DENVER AREA	KS TREGO	75000
857	Amoco	DENVER AREA	KS WABAUNSEE	75000
859	Amoco	KANSAS AREA	KS MIAMI	86500
32	Farmland Industries, Inc.	WINDFIELD CITY LAKE	KS COWLEY	256
33	Farmland Industries, Inc.	COPAN STATE WILDLIFE	KS MONTGOMERY	1062
35	Clear Creek, Inc.	PRATT	KS PRATT	0
36	Clear Creek, Inc.	KIOWA	KS KIOWA	0
37	Clear Creek, Inc.	WALNUT CREEKS	KS NESS	2400
38	Clear Creek, Inc.	SMOKEY HILL	KS TREGO	1476
39	Clear Creek, Inc.	OGALLAH	KS NESS	700
40	National Cooperative	UNRUH	KS MCPHERSON	0
41	National Cooperative	LINDSBURG/ROXBURY	KS MCPHERSON	864

12/08/93

Seq	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
41	National Cooperative	LINDSBURG/ROXBURY	KS SALINE	864
42	National Cooperative	SALINA	KS SALINA	400
43	National Cooperative	ANNELLY	KS HARVEY	0
113	Koch Gathering Systems,	ZONE 1	KS Barber	1272
113	Koch Gathering Systems,	ZONE 1	KS Barton	1272
113	Koch Gathering Systems,	ZONE 1	KS Clark	1272
113	Koch Gathering Systems,	ZONE 1	KS Comanche	1272
113	Koch Gathering Systems,	ZONE 1	KS Edwards	1272
113	Koch Gathering Systems,	ZONE 1	KS Ellis	1272
113	Koch Gathering Systems,	ZONE 1	KS Ellsworth	1272
113	Koch Gathering Systems,	ZONE 1	KS Graham	1272
113	Koch Gathering Systems,	ZONE 1	KS Hodgeman	1272
113	Koch Gathering Systems,	ZONE 1	KS Kiowa	1272
113	Koch Gathering Systems,	ZONE 1	KS Mcpherson	1272
113	Koch Gathering Systems,	ZONE 1	KS Osborne	1272
113	Koch Gathering Systems,	ZONE 1	KS Pawnee	1272
113	Koch Gathering Systems,	ZONE 1	KS Pratt	1272
113	Koch Gathering Systems,	ZONE 1	KS Rice	1272
113	Koch Gathering Systems,	ZONE 1	KS Rooks	1272
113	Koch Gathering Systems,	ZONE 1	KS Rush	1272
113	Koch Gathering Systems,	ZONE 1	KS Russell	1272
113	Koch Gathering Systems,	ZONE 1	KS Sedgwick	1272
113	Koch Gathering Systems,	ZONE 1	KS Stafford	1272
113	Koch Gathering Systems,	ZONE 1	KS Trego	1272
114	Koch Gathering Systems,	ZONE 2	KS Decatur	400
114	Koch Gathering Systems,	ZONE 2	KS Finney	400
114	Koch Gathering Systems,	ZONE 2	KS Gove	400
114	Koch Gathering Systems,	ZONE 2	KS Greeley	400

12/08/93

Seq	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
114	Koch Gathering Systems,	ZONE 2	KS Haskell	400
114	Koch Gathering Systems,	ZONE 2	KS Hodgeman	400
114	Koch Gathering Systems,	ZONE 2	KS Kearny	400
114	Koch Gathering Systems,	ZONE 2	KS Lane	400
114	Koch Gathering Systems,	ZONE 2	KS Logan	400
114	Koch Gathering Systems,	ZONE 2	KS Ness	400
114	Koch Gathering Systems,	ZONE 2	KS Rawlins	400
114	Koch Gathering Systems,	ZONE 2	KS Sherman	400
114	Koch Gathering Systems,	ZONE 2	KS Thomas	400
114	Koch Gathering Systems,	ZONE 2	KS Wallace	400
344	Chase Transportation	KANSAS ZONE 1	KS Butler	4200
344	Chase Transportation	KANSAS ZONE 1	KS Sedgwick	4200
	Chase Transportation	KANSAS ZONE 1	KS Reno	4200
344	Chase Transportation	KANSAS ZONE 1	KS Stafford	4200
344	Chase Transportation	KANSAS ZONE 1	KS Barton	4200
344	Chase Transportation	KANSAS ZONE 1	KS Rush	4200
344	Chase Transportation	KANSAS ZONE 1	KS Ness	4200
344	Chase Transportation	KANSAS ZONE 1	KS Lane	4200
344	Chase Transportation	KANSAS ZONE 1	KS Scott	4200
344	Chase Transportation	KANSAS ZONE 1	KS Wichita	4200
344	Chase Transportation	KANSAS ZONE 1	KS Logan	4200
344	Chase Transportation	KANSAS ZONE 1	KS Wallace	4200
344	Chase Transportation	KANSAS ZONE 1	KS Hodgeman	4200
344	Chase Transportation	KANSAS ZONE 1	KS Pawnee	4200
100	Mobil Pipeline Company	REGION 7	KS Rooks	45545
100	Mobil Pipeline Company	REGION 7	KS Trego	45545
100	Mobil Pipeline Company	REGION 7	KS Graham	45545
100	Mobil Pipeline Company	REGION 7	KS Sheridan	45545

12/08/93

Seq	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
826	Total Petroleum, Inc.	KANSAS-OKLAHOMA	KS Sumner	11998
826	Total Petroleum, Inc.	KANSAS-OKLAHOMA	KS Cowley	11998
826	Total Petroleum, Inc.	KANSAS-OKLAHOMA	KS Marion	11998
826	Total Petroleum, Inc.	KANSAS-OKLAHOMA	KS Butler	11998
240	Texaco Trading &	KANSAS OPERATING	MO Vernon	15355
240	Texaco Trading &	KANSAS OPERATING	MO Platte	15355
553	Conoco Pipe Line Company	MT. VERNON	MO NEWTON	11573
553	Conoco Pipe Line Company	MT. VERNON	MO JASPER	11573
553	Conoco Pipe Line Company	MT. VERNON	MO LAWRENCE	11573
553	Conoco Pipe Line Company	MT. VERNON	MO GREENE	11573
553	Conoco Pipe Line Company	MT. VERNON	MO WEBSTER	11573
553	Conoco Pipe Line Company	MT. VERNON	MO DALLAS	11573
	Conoco Pipe Line Company	MT. VERNON	MO LACLEDE	11573
553	Conoco Pipe Line Company	MT. VERNON	MO CAMDEN	11573
553	Conoco Pipe Line Company	MT. VERNON	MO McDONALD	11573
553	Conoco Pipe Line Company	MT. VERNON	MO BARRY	11573
554	Conoco Pipe Line Company	BELLE	MO CAMDEN	11573
554	Conoco Pipe Line Company	BELLE	MO PULASKI	11573
554	Conoco Pipe Line Company	BELLE	MO MARIES	11573
554	Conoco Pipe Line Company	BELLE	MO GASCONADE	11573
554	Conoco Pipe Line Company	BELLE	MO FRANKLIN	11573
554	Conoco Pipe Line Company	BELLE	MO WARREN	11573
554	Conoco Pipe Line Company	BELLE	MO ST. CHARLES	11573
554	Conoco Pipe Line Company	BELLE	MO ST. LOUIS	11573
555	Conoco Pipe Line Company	ST. CHARLES-WOOD	MO ST. CHARLES	8445
561	Williams Pipe Line	IOLA ZONE	MO HENRY	9548
562	Williams Pipe Line	KANSAS CITY ZONE	MO ANDREW	6100
562	Williams Pipe Line	KANSAS CITY ZONE	MO PLATTE	6100

12/08/93

Seq	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
562	Williams Pipe Line	KANSAS CITY ZONE	MO CLAY	6100
562	Williams Pipe Line	KANSAS CITY ZONE	MO HARRISON	6100
562	Williams Pipe Line	KANSAS CITY ZONE	MO JACKSON	6100
563	Williams Pipe Line	HANNIBAL ZONE	MO MONITEAU	7000
563	Williams Pipe Line	HANNIBAL ZONE	MO BOONE	7000
563	Williams Pipe Line	HANNIBAL ZONE	MO RALLS	7000
698	ENRON	ZONE FF	MO PLATTE	8212
698	ENRON	ZONE FF	MO BUCHANAN	8212
698	ENRON	ZONE FF	MO CLINTON	8212
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO JACKSON	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO RAY	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO CARROLL	2300
	Arco Pipeline Company	HOUSTON-FORT MADISON	MO CHARITON	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO LINN	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO MACON	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO ADAIR	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO KNOX	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO SCOTLAND	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO CLARK	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO RANDOLPH	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO AUDRAIN	2300
830	Arco Pipeline Company	HOUSTON-FORT MADISON	MO BOONE	2300
859	Amoco	KANSAS AREA	MO ADAIR	86500
859	Amoco	KANSAS AREA	MO ANDREW	86500
859	Amoco	KANSAS AREA	MO ATCHISON	86500
859	Amoco	KANSAS AREA	MO BATES	86500
859	Amoco	KANSAS AREA	MO BUCHANAN	86500
859	Amoco	KANSAS AREA	MO CALDWELL	86500

12/08/93

Seq	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
859	Amoco	KANSAS AREA	MO CARROLL	86500
859	Amoco	KANSAS AREA	MO CASS	86500
859	Amoco	KANSAS AREA	MO CHARITON	86500
859	Amoco	KANSAS AREA	MO CLARK	86500
859	Amoco	KANSAS AREA	MO CLAY	86500
859	Amoco	KANSAS AREA	MO CLINTON	86500
859	Amoco	KANSAS AREA	MO DAVIESS	86500
859	Amoco	KANSAS AREA	MO GRUNDY	86500
859	Amoco	KANSAS AREA	MO JACKSON	86500
859	Amoco	KANSAS AREA	MO JOHNSON	86500
859	Amoco	KANSAS AREA	MO KNOX	86500
859	Amoco	KANSAS AREA	MO LAFAYETTE	86500
	Amoco	KANSAS AREA	MO LEWIS	86500
859	Amoco	KANSAS AREA	MO LINCOLN	86500
859	Amoco	KANSAS AREA	MO LINN	86500
859	Amoco	KANSAS AREA	MO LIVINGSTON	86500
859	Amoco	KANSAS AREA	MO MACON	86500
859	Amoco	KANSAS AREA	MO MARION	86500
859	Amoco	KANSAS AREA	MO MONROE	86500
859	Amoco	KANSAS AREA	MO NODAWAY	86500
859	Amoco	KANSAS AREA	MO PIKE	86500
859	Amoco	KANSAS AREA	MO PUTNAM	86500
859	Amoco	KANSAS AREA	MO RALLS	86500
859	Amoco	KANSAS AREA	MO RANDOLPH	86500
859	Amoco	KANSAS AREA	MO RAY	86500
859	Amoco	KANSAS AREA	MO SALINE	86500
859	Amoco	KANSAS AREA	MO SCOTLAND	86500
859	Amoco	KANSAS AREA	MO SHELBY	86500

12/08/93

Seq	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
859	Amoco	KANSAS AREA	MO ST CHARLES	86500
859	Amoco	KANSAS AREA	MO SULLIVAN	86500
821	Explorer Pipeline Company	GLENPOOL AREA	MO Newton	48600
821	Explorer Pipeline Company	GLENPOOL AREA	MO Jasper	48600
821	Explorer Pipeline Company	GLENPOOL AREA	MO Lawrence	48600
821	Explorer Pipeline Company	GLENPOOL AREA	MO Dade	48600
821	Explorer Pipeline Company	GLENPOOL AREA	MO Green	48600
821	Explorer Pipeline Company	GLENPOOL AREA	MO Polk	48600
822	Explorer Pipeline Company	WOODRIVER AREA	MO Polk	27000
822	Explorer Pipeline Company	WOODRIVER AREA	MO Dallas	27000
822	Explorer Pipeline Company	WOODRIVER AREA	MO Laclede	27000
822	Explorer Pipeline Company	WOODRIVER AREA	MO Camden	27000
	Explorer Pipeline Company	WOODRIVER AREA	MO Pulaski	27000
822	Explorer Pipeline Company	WOODRIVER AREA	MO Maries	27000
822	Explorer Pipeline Company	WOODRIVER AREA	MO Gasconades	27000
822	Explorer Pipeline Company	WOODRIVER AREA	MO Franklin	27000
822	Explorer Pipeline Company	WOODRIVER AREA	MO St Charles	27000
100	Mobil Pipeline Company	REGION 7	MO Ripley	45545
100	Mobil Pipeline Company	REGION 7	MO Carter	45545
100	Mobil Pipeline Company	REGION 7	MO Wayne	45545
100	Mobil Pipeline Company	REGION 7	MO Madison	45545
100	Mobil Pipeline Company	REGION 7	MO Bollinger	45545
100	Mobil Pipeline Company	REGION 7	MO Perry	45545
623	Koch Pipeline, Inc.	BETHANY 4	MO Harrison	9500
624	Koch Pipeline, Inc.	BETHANY 5	MO Harrison	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Mercer	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Grundy	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Sullivan	9300

12/08/93

Seq	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
624	Koch Pipeline, Inc.	BETHANY 5	MO Linn	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Macon	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Randolph	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Monroe	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Audrain	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Montgomery	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO Lincoln	9300
624	Koch Pipeline, Inc.	BETHANY 5	MO St. Charles	9300
501	Kaneb Pipe Line Company	KANEB ZONE 2	NB POLK	1951
501	Kaneb Pipe Line Company	KANEB ZONE 2	NB THAYER	1951
501	Kaneb Pipe Line Company	KANEB ZONE 2	NB WEBSTER	1951
501	Kaneb Pipe Line Company	KANEB ZONE 2	NB YORK	1951
	Kaneb Pipe Line Company	KANEB ZONE 3	NB BUTLER	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB CEDAR	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB COLFAX	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB CUMING	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB DIXON	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB FRONTIER	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB GOSPER	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB KEARNEY	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB LINCOLN	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB MADISON	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB PHELPS	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB PIERCE	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB PLATTE	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB POLK	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB STATION	703
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB WAYNE	703

12/08/93

Seq	Operator Name	Zone ID	State/County	Worst Case D/C Vol.
502	Kaneb Pipe Line Company	KANEB ZONE 3	NB YORK	703
503	Kaneb Pipe Line Company	KANEB ZONE 4	NB CEDAR	628
503	Kaneb Pipe Line Company	KANEB ZONE 4	NB DIXON	628
670	ENRON	ZONE D	NB GAGE	7499
671	ENRON	ZONE E	NB GAGE	6349
671	ENRON	ZONE E	NB JOHNSON	6349
671	ENRON	ZONE E	NB OTOE	6349
672	ENRON	ZONE F	NB OTOE	5015
672	ENRON	ZONE F	NB CASS	5015
673	ENRON	ZONE G	NB OTOE	5774
673	ENRON	ZONE G	NB CASS	5774
675	ENRON	ZONE I	NB CASS	6923
	ENRON	ZONE I	NB MILLS	6923
675	ENRON	ZONE I	NB MONTGOMERY	6923

APPENDIX C

1. REGION VII RESPONDERS
2. EQUIPMENT
3. EPA/USCG RESPONSE BOUNDARIES

APPENDIX C.1

EMERGENCY RESPONDERS

Contractors and responders are listed in this Appendix for reference to be used during an emergency response, and to help regulated facilities review what responders are available to them for contingency planning purposes. A brief explanation of services provided by the special teams listed in this appendix can be found in Section II.L of the Area Contingency Plan.

As updated information is received, it will be added to this appendix.

RESPONSE/EQUIPMENT CONTRACTORS AND CONSULTANTS

The following list of companies was compiled from contractors listed within approximately eighty facility response plans (FRPs) which currently meet significant and substantial harm criteria within EPA Region VII. This is an unconfirmed list with contacts, addresses, and phone numbers being taken directly from the FRPs. This list will be updated as information is confirmed and as new information becomes available.



ST	CONTRACTOR NAME	ADDRESS	CITY/STATE/ZIP	PHONE	CONTACT
	A & M TANK SERVICE			221-0480	
	BAY WEST, INC.			(800)279-0456	DON ERICKSON
	C.E.E. CO. ENVIRO. SERVICES				JERRY KEMP
	HERITAGE REMED./ENG., INC.			(800)487-7455	GEOFFREY LANGLEY
	OHM ENVIRONMENTAL SERVICE			(800)537-9540	
	PETROASSIST			(800)424-9300	
	RIEDEL ENVIRO. SERVICES, INC.			(800)334-0004	ROBERT KOENTOP
	SUPERIOR EQUIPMENT CO.			644-6000	
FL	CAPE CANAVERAL MARINE SERV.		CAPE CANAVERAL, FL		
FL	CLIFF BERRY, INC.		PORT EVERGLADES, FL		
FL	DIVERSIFIED ENVIR. SERV., INC.		TAMPA, FL		
FL	ENVIRO. RECOVERY GROUP, LTD.		JACKSONVILLE, FL		
FL	FLORIDA SPILL RESPONSE CORP.		COCOA, FL		
IA	ALLWASTE ENVIRO. SERV. (EIS)		CLINTON, IA	(319)259-2130	MARTY FLEUETTE
IA	BLACKHAWK FLEET			(319)322-3510	GLEN JOHNSON
IA	CAPTAIN CLEAN		CEDAR RAPIDS, IA	(319)396-7151	
IA	CONST. TECH. & REMED. COMP.	530 RIVER DRIVE BOX 153	PRINCETON, IA 52768	(319)289-5853	DENNY BENNITT
IA	DENNIS DIERKS EXCAVATING			(319)225-6641	DENNIS DIERKS
IA	EIS INDUST. SERV. (ALLWASTE)		CLINTON, IA	(319)243-7951	
IA	ENVIROMARK	422 PERSHING AVE	DAVENPORT, IA 52801	(319)323-0616	JIM HOBBS
IA	EVANS ENGINEERING			(712)366-5834	JEFF EVANS
IA	HENIGAN CONSTRUCTION		FORT MADISON, IA	(319)372-1784	
IA	PAULSON CONSTRUCTION COMPANY			(712)323-4073	MARC PAULSON
IA	QUAD CITY WATER TESTING			(319)289-3373	BOB BLACK
IL	CLEAN HARBORS, INC.		CHICAGO, IL		
IL	CONST. TECH. & REMED. COMP.	11 N MAIN	LEAF RIVER, IL 61047	(815)738-6146	DENNY BENNITT
IL	HERITAGE REMED. & ENG., INC.		CHICAGO, IL	(800)487-7455	
IL	HERITAGE REMED./ENG., INC.	1319 MARQUETTE DR	ROMEDEVILLE, IL 60441	(708)378-1600	GEOFFREY LANGLEY
IL	ODESCO INDUST. SERV., INC.	100 WASHINGTON BOX 862	SOUTH ROXANA, IL 62087-0862	(618)254-4874	
IL	RIEDEL ENVIRO. SERV., INC.	5233 N PEARL ST	ROSEMONT, IL 60018	(708)671-8061	
IL	TRIAD COMPANY	1600 MADISON AVENUE	SOUTH ROXANA, IL 62087	(618)251-4116	
IN	HERITAGE REMED./ENG., INC.	P.O. BOX 51020	INDIANAPOLIS, IN 46251	(317)243-7475	
KS	BANKS CONSTRUCTION CO.	P.O. BOX 995	EL DORADO, KS 67402		JOHN BANKS
KS	GROENDYKE TRANSPORT INC.		WICHITA, KS	755-1266	
KS	HAZ-MAT RESPONSE, INC.	1203 C SOUTH PARKER	OLATHE, KS 66061	(913)782-5151	
KS	L.G. PIKE CONSTRUCTION	815 W MADISON	ARKANSAS CITY, KS 67005	(316)442-9150	TED BIGGS
KS	OILFIELD TRUCKING SERVICE	757 OIL HILL RD	EL DORADO, KS 67042		ALBERT HOGBOOM
KY	HERITAGE REMED./ENG., INC.	4925 HELLER STREET	LOUISVILLE, KY 40218	(502)473-0638	GREG DAUGHERTY
KY	PADUCAH MUTUAL ASSIST. ASSOC.		PADUCAH, KY		
KY	TUCKER ENVIRO. CONSULTANTS	7365 OLD MAYFIELD RD	PADUCAH, KY 42003	(502)554-0811	JANICE TUCKER
LA	AMBAR, INC.		LAFAYETTE, LA		
LA	ANTI-POLLUTION, INC.		MORGAN CITY, LA		
LA	LARCO ENVIRO. SERV., INC.		LAKE CHARLES, LA		
LA	MARTECH USA, INC.		BROUSSARD, LA		
LA	RIEDEL ENVIRO. SERV., INC.		NEW ORLEANS, LA		
LA	THOMPSON ENVIRO. MGMT., INC.		NEW ORLEANS, LA		
LA	UNIVERSAL ENVIRONMENTAL		SULPHUR, LA		
MA	BOSTON LINE & SERV. CO., INC.		BOSTON, MA		
MD	CLEAN AMERICA, INC.		BALTIMORE, MD		
MN	BAY WEST INC.	FIVE EMPIRE DRIVE	ST PAUL, MN 55103-1867	(612)291-0456	RONDI ERICKSON
MN	KOCH SERVICE INC.			(612)228-4611	STEVE ERICKSON
MN	OHM CORPORATION	5010 HILLSBORO AVE N	NEW HOPE, MN 55428	(612)531-0987	
MO	ABLE INDUSTRIES, INC.	7151 N MARKET	ST LOUIS, MO 63133	(314)863-8755	
MO	DELTA ENVIRO-TECH, INC.	303 S MAIN STREET	SIXESTON, MO 63801	(314)471-7041	DARRELL PULLEN

MO DOCTOR ROOTER	2138 WOODSON ROAD	ST LOUIS, MO 63114	(314)426-6620	
MO ENVIRO. SPECIALISTS, INC.	3001 E83rd ST	KANSAS CITY, MO 64132	(816)523-5081	STEVE FORTNEY
MO GENERAL EQUIPMENT COMPANY			(314)535-9107	
MO HERITAGE REMED./ENG., INC.	183 McDONNELL BLVD	ST LOUIS, MO 63042	(314)521-3600	GLENN BORESI
MO INDUSTRIAL SERVICE INC.	1850 WALTON ROAD	ST LOUIS, MO 63114	(314)423-8822	
MO KIESEL	4801 FYLER AVENUE	ST LOUIS, MO 63116	(314)351-5500	LARRY GOODEN
MO MUSSELMAN & HALL CONTRACTORS	4922 BLUE BANKS	KANSAS CITY, MO 64130	(816)861-1234	
MO O.H. MATERIALS CO.	42 W CENTRAL INDUSTRIAL DR	O'FALLON, MO 63366	(314)272-3303	
MO RIEDEL ENVIRO.EMERG.SERV. CO	18207 EDISON AVE.	CHESTERFIELD, MO 63005	(314)532-7660	
MO SUPERIOR EQUIPMENT COMPANY	3283 IVANHOE AVENUE	ST LOUIS, MO 63139	(314)644-6000	
MO THE KIESEL CO.	4801 FYLER AVE	ST LOUIS, MO 63116	(314)421-0328	GARY RALPH
MO UNITED PETROLEUM COMPANY			(314)241-3767	
NC SPECIALIZED MARINE, INC.		WRIGHTSVILLE BEACH, NC		
NE ARMY CORPS OF ENGINEERS			(402)453-0202	STEPHEN EARL
NE T & R TRENCHING INC.			(402)331-7998	
NE WYNNE TRANSPORT SERVICE			(402)342-4001	HANK ALBRECHT
NJ UNDERWATER TECHNIQS, INC.		CAMDEN, NJ		
NY ISLAND TRANSPORTATION CORP.		WEST BABYLON, NY		
NY NEG ENVIRO. SERV., INC.		CALVERTON, NY		
OH CHEMPOWER, INC.		AKRON, OH		
OH HERITAGE REMED./ENG., INC.	5656 OPPORTUNITY DRIVE	TOLEDO, OH 43612	(419)478-4396	
OH O.H. MATERIALS INC.	P.O. BOX 1022	FINDLEY, OH 45840	(419)423-3526	
OK ACME PRODUCTS CO.	2666 N DARLINGTON	TULSA, OK 74158	(918)836-7184	JAMES G. DUNCAN
PA AMERICAN INDUSTRIAL MARINE		ALLENTOWN, PA		
PA GSM ENVIRONMENTAL, INC.		PARKER FORD, PA		
PA McCUTHEON ENTERPRISES, INC.		APOLLO, PA		
TX COMPLETE ENVIRO. SERV., INC.		SPRING, TX		
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U.S. Department
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United States
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NVIC 12-92

04 DEC 1992

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 12-92

Subj: Guidelines for the Classification and Inspection of Oil
Spill Removal Organizations (OSROs)

Ref: (a) NVIC No. 8-92, "Interim Guidelines for the Development
and Review of Vessel Response Plans"

(b) NVIC No. 7-92, "Interim Guidelines for the Development
and Review of Response Plans for Marine
Transportation-Related Facilities Including Deepwater
Ports"

1. PURPOSE. The purpose of this circular is to facilitate the
preparation and review of vessel and facility response plans
by providing guidance on the classification of oil spill
removal organizations. The guidelines propose a method of
estimating the capacity of oil spill removal organizations
to contain and remove oil from the water and shorelines.

2. BACKGROUND.

a. Section 4202 of the Oil Pollution Act of 1990 (OPA 90)
amended section 311(j) of the Federal Water Pollution
Control Act (FWPCA) to require the preparation and
submission of response plans for all vessels defined as
"tank vessels" under 46 U.S.C. 2101 and for certain oil-
handling facilities. Because there is a statutory
deadline of February 18, 1993 for owners and operators to
submit response plans, and because a final rule on
submittal of response plans had not been published, the

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	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A																										
B		2	11	0		1		1						1	3	2	1		5							30
C					*								*													
D	1	1			1	*						1	*													
E															2	1	20									
F	1											1														
G																										
H																										

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NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 12-92

04 DEC 1992

2. a. (cont'd) Coast Guard issued Navigation and Inspection Circulars (NVICs) Nos. 7-92 and 8-92 (references (a) and (b)). These NVICs provide guidance on the preparation and submission of response plans.
- b. Under OPA 90, an owner or operator who is required to submit a response plan must, among other things, "identify, and ensure by contract or other means approved by the President the availability of, private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge." The magnitude of the investment in specialized equipment for recovering oil from the water and shorelines, temporary storing it, and transporting it for disposal, and for training sufficient numbers of personnel to remove such discharge, in all foreseeable locations and operating environments, is unprecedented for marine environmental response preparation. The system for assembling, mobilizing, and controlling these resources is extremely complex. To meet the statutory requirements, each response plan must identify the means for accomplishing these massive tasks.

3. DISCUSSION.

- a. Under the guidelines contained in references (a) and (b) an owner or operator would identify private personnel and equipment sufficient to remove three levels of spills: "average most probable discharge" (AMPD), a "maximum most probable discharge" (MMPD), and a "worst case discharge" (WCD). The owner or operator may demonstrate capability to remove those volumes of discharged oil by listing the available resources and their capacity to contain, remove, and store the recovered volumes. These resources include the various types of booms to contain oil in different environments and water depths and to protect shorelines; the types, capacities, and seakeeping capabilities of skimming and vacuum systems to recover oil from the water and shorelines; and sufficient storage capacity to temporarily store recovered oil and contaminated debris for transportation and disposal. The owner or operator must determine that these resources are not only available, but that they may be relied upon to operate effectively in the planned spill environment, prudence may dictate that the owner or operator inspect the oil spill removal organization's facility, audit the personnel and training records, inventory and inspect equipment, audit maintenance records, and establish to his or her satisfaction that the resources are available and

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 12-

04 DEC 1992

3. a. (cont'd) dependable. Given that no one OSRO is likely to own or otherwise control sufficient resources to meet all of a vessel or facility owner's or operator's responsibilities, and that combinations of different removal organizations and capabilities may be needed, the owner's or operator's obligations are daunting.
- b. Because, under OPA 90, vessel and facility owners or operators are required to ensure by contract or other approved means sufficient response capacity to meet their planning responsibilities, OSROs are presented with both a business opportunity and a problem. To acquire contracts with vessel or facility owners or operators in an open market, an OSRO must sell its capabilities and clearly demonstrate that it can meet its prospective customer's response planning needs in the bright light of competition. Advertising its capabilities to many prospective customers may subject the OSRO to repeated inspections by owner's or operator's representatives who may view the resources and capabilities differently.
- c. OPA 90 gives the Coast Guard the responsibility to review and approve response plans. The Coast Guard must review all of the listed resources and response capabilities before the response plan can be finally approved. The Coast Guard may also verify that the resources are available and capable of meeting planning requirements, as represented by the owner or operator. This could involve yet another inspection of the OSRO's facility, personnel and maintenance records, equipment inventory, and performance operability checks. Without a simpler means of identifying adequate and available private response resources, preparation and review of response plans could be extremely inefficient, labor-intensive, and time-consuming for all parties - the owner or operator, the OSRO, and the Coast Guard.
- d. National guidelines for classifying OSROs based on standard oil spill volumes would greatly facilitate the selection of OSROs by plan preparers. Such guidelines will also facilitate the Coast Guard's review of individually submitted response plans and assist OSROs in evaluating their own capabilities to meet the needs of plan preparers and the Coast Guard. With standard classifications, plan preparers could better match their planning requirements to an OSRO's estimated capacity to recover oil. The Coast Guard could more quickly determine whether the removal capacity of the classified OSRO, or combination of OSROs, identified by the plan

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 12-92.
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3. d. (cont'd) preparer was sufficient to meet the owner's or operator's planning requirements. OSROs could use these guidelines to present their capabilities and removal capacities more convincingly, facilitating the contracting process with plan preparers.

e. Enclosure (1) to this NVIC provides voluntary guidelines by which OSROs may be classified based on standard oil spill removal capacities.

4. IMPLEMENTATION.

a. Vessel and facility owners or operators who are required to prepare and submit response plans to the Coast Guard may use the provisions of the enclosed guidance to identify OSROs with the capacity to meet their individual planning volume requirements as described in references (a) and (b). Compliance with this NVIC is voluntary and owners or operators need not limit their response resources to OSROs that have been classified by the Coast Guard. Owners or operators remain responsible for determining that OSROs identified in their plan are capable of meeting the various response time requirements specified in references (a) and (b). The owner or operator that submits a response plan and identifies OSROs classified in accordance with this guidance should indicate that fact in a letter accompanying the plan submission. Upon notification by the OSRO or the Coast Guard of a change in the OSRO's classification, the owner or operator should reevaluate his or her response plan and reaffirm its validity as provided in references (a) and (b).

b. Oil spill removal organizations wishing to participate the classification process should follow the procedures described in enclosure (1). Classified OSROs whose classification status changes for any reason should notify owners or operators with whom they have contract to provide response resources that the owner's or operator's ability to meet his or her planning requirements may be affected.


c. The Coast Guard will classify OSROs, in accordance with the process described in enclosure (1), and will make public a list of classified OSROs and any changes to existing classifications. The Coast Guard will accept evidence of such classification in lieu of a complete list of removal equipment, as provided for in reference (a) and (b), as evidence that the owner or operator has identified sufficient capacity to meet his or her planning requirements.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 12

04 DEC 1982

4. d. Oil Spill Removal Organizations following this guidance should forward their applications to the Coast Guard at the following address:

National Strike Force Coordination Center
(ATTN: OSRO CLASSIFICATION REVIEW)
1461 U.S. 17 North
Elizabeth City, NC 27909


A. E. HENN
Rear Admiral, U.S. Coast Guard
Chief, Office of Marine Safety,
Security and Environmental Protection

Encl: (1) Guidelines for Classifying Oil Spill Removal
Organizations (OSROs)

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Guidelines for Classifying
Oil Spill Removal Organizations (OSROs)

Enclosure (1) to NVIC 12-92

GUIDELINES FOR CLASSIFYING
OIL SPILL REMOVAL ORGANIZATIONS (OSROs)

TABLE OF CONTENTS

Section A	Definitions	page 3
Section B	Classification Process	page 5
Section C	OSRO Classifications for Various Environments	page 10

GUIDELINES FOR CLASSIFYING OIL SPILL REMOVAL ORGANIZATIONS (OSRO)

Section A. **DEFINITIONS.** The definitions in this section are provided to assist the reader in understanding the provisions of this NVIC. They are consistent with those included in references (a) and (b).

1. Containment boom means boom which is intended to contain oil for recovery by mechanical means. References (a) and (b) (appendix A, table 1) display recommended boom properties for effective use in various operating environments (i.e., river, harbor, Great Lakes, offshore, open ocean, etc.).
2. Great Lakes means Lakes Superior, Michigan, Huron, Erie, and Ontario; their connecting and tributary waters; the Saint Lawrence River as far as Saint Regis; and adjacent port areas.
3. Inland area means the area shoreward of the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) as defined in §§ 80.740 - 80.850 of 33 CFR chapter I. The inland area does not include the Great Lakes or rivers and canals areas.
4. Nearshore area means the area extending seaward 12 miles from the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico it means the area extending seaward 12 miles from the line of demarcation (COLREG lines) as defined in §§ 80.740 - 80.850 of 33 CFR chapter I.
5. Non-persistent or Group I oil means a petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions--
 - (a) At least 50% of which by volume, distill at a temperature of 340 degrees C (645 degrees F); and
 - (b) At least 95% of which by volume, distill at a temperature of 370 degrees C (700 degrees F).
6. Ocean means the open ocean, offshore area, and nearshore area as defined in this document.
7. Offshore area means the area up to 38 nautical miles seaward of the outer boundary of the nearshore area.

8. Oil Spill Removal Organization (OSRO) means any person or persons who own or otherwise control oil spill removal resources that are designed for, or are capable of, removing oil from the water or shoreline. Control of such resources through means other than ownership may include leasing or subcontracting of equipment or, in the case of trained personnel, by having contracts, evidence of employment, or consulting agreements. OSROs provide response equipment and services, individually or in combination with subcontractors or associated contractors, under contract or other means approved by the President, directly to an owner or operator of a tank vessel or facility required to have a response plan under 33 U.S.C. 1321(j)(5). OSROs must be able to mobilize and deploy equipment or trained personnel and remove, store, and transfer recovered oil. Persons such as sales and marketing organizations (e.g., distributorships and manufacturer's representatives) that warehouse or store equipment for sale are not OSROs.
9. Open ocean means the area from 38 nautical miles seaward of the outer boundary of the nearshore area, to the seaward boundary of the EEZ.
10. Persistent oil means a petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this document, persistent oils are further classified based on specific gravity as follows:
- Group I*
- (a) Group II - ~~specific gravity less than .85.~~ (e.g. gasoline, kerosene, Nigerian Light Crude)
 - (b) Group III - specific gravity between .85 and less than .95. (e.g. Arabian and Kuwait Crude)
 - (c) Group IV - specific gravity .95 to and including 1.0. (e.g. Bunker C, #6 Fuel Oil)
 - (d) Group V - specific gravity greater than 1.0. (e.g. Carbon Black)
11. Protective boom means boom that is used for deflecting spilled oil. References (a) and (b) (appendix A, table 1) display recommended boom properties for various operating environments (i.e. river, harbor, Great Lakes, offshore, open ocean, etc.).
12. Rivers and canals means bodies of water, including the Intracoastal Waterways and other waterways artificially created for navigation, confined within the inland area that have a project depth of 12 feet or less.
13. Recovery capacity means skimmer or vacuum capacity as calculated in references (a) and (b).

14. Temporary storage capacity means, for the purposes of classification, sufficient storage capacity to securely contain two days of planned recovery. Temporary storage capacity may include inflatable bladders, rubber barges, certificated barge capacity, or prearranged shore-based storage capacity. It does not include vessels or barges of opportunity or shore-based storage for which no prearrangements have been made.

Section 2. CLASSIFICATION PROCESS. Classification is a process for identifying oil spill removal organizations on the basis of their ownership or control of specialized equipment and trained personnel to remove oil from the environment. There are five classes of OSROs (Class A, B, C, D, and E) for each of four marine environments. Classification of an OSRO by the Coast Guard will normally be for a period of 3 years. Review for reclassification may be initiated by either the Coast Guard or the OSRO. Classification does not predict operational performance or relieve an owner or operator from the requirement to consider response times in the planning process, nor from the responsibility to effectively and promptly remove spilled oil from the environment.

1. APPLICATION FOR CLASSIFICATION.

- a. Any OSRO may apply for classification. The Coast Guard will classify applicants on the basis of their estimated capacity to remove oil from the marine environment, as calculated from the information provided in the application and enclosure (1) to references (a) and (b).
- b. An OSRO seeking classification should supply information about its equipment and personnel inventory in a format similar to that provided in appendix (A) of this NVIC. Applicants should provide information in a manner which is clear, concise, and easily read. OSROs may be classified to the levels identified in Section 3 of this enclosure for the environment(s) in which they intend to operate.
- c. The applicant should identify the latitude and longitude of the locations from which oil spill response resources will be mobilized. If resources are available from more than one location, all resources within a twenty five-mile radius may be counted as if available from a single location. The OSRO should list similarly any resources outside the 25-mile radius. Latitude and longitude will be used to assess the mobilization radius within which the OSRO can meet the response guidelines established in references (a) and (b).

- d. An applicant shall attest that the factual information provided regarding the applicant's response equipment and personnel is correct to the best of the applicant's knowledge and belief. The applicant shall agree to be visited by Coast Guard personnel for the purpose of verifying the information contained in the application.
- e. The applicant should list separately any discharge removal equipment purchased or contracted for, but not yet delivered when the application is filed. An applicant may be asked to provide written proof of the contracted delivery date of the equipment. Equipment which is contracted for delivery within six months of the date of application will be included toward a provisional classification but listed separately until delivery is confirmed.
- f. A classified OSRO should notify the Captain of the Port (COTP) of the zone in which the OSRO's resources are located of significant changes in response capability that might effect the classification and the OSRO's ability to respond to a spill as planned. A "significant" change is a reduction in the OSRO's classified capacity by a factor of 10% for a period of 48 hours or longer.
- g. An OSRO may submit an application to the following address:

National Strike Force Coordination Center (NSFCC) (Attn: OSRO CLASSIFICATION REVIEW)
1461 U.S. 17 North
Elizabeth City,
North Carolina 27909.

The NSFCC can be reached by telephone at (919) 331-6000 or by facsimile at (919) 331-6012.

2. REVIEW AND CLASSIFICATION PROCESS.

- a. An applicant's resources will be assessed on the basis of the information provided, the process described in this guidance, and the information provided in references (a) and (b) (appendix A to enclosure (1)). Both references identify the formulae for calculating effective daily recovery capacity, operating parameters for skimmers, and minimum guidelines for booms. When assigning OSROs to one or more response classes, the quantity of equipment, its designed purpose, the planning capacity of the resources identified in the application, and the number of trained response personnel will be considered. Incomplete applications will be returned to the applicant immediately with an explanation of the deficiency.

- b. After completing the review of the information provided by the applicant, the Coast Guard will classify the OSRO and issue an interim letter of classification identifying the quantity and calculated capacity of the critical resources. When the Coast Guard has conducted a familiarization visit it will issue a final letter of classification that is valid for a period of three years from the date of issuance.

3. INSPECTION AND VERIFICATION.

- a. The Coast Guard reserves the right to conduct inspection visits to verify that the OSRO's inventory of equipment and trained personnel accurately reflects the information provided in the application. The inspection team may include members of the National Strike Force, the local Marine Safety Office (MSO), and other Coast Guard units. The visit will also allow U.S. Coast Guard personnel to become acquainted with the organizations with which they will work in the event of a spill.
- b. The Coast Guard may inspect the OSRO's equipment and personnel inventory and audit appropriate records. Any such audit will be a quality assurance check of the equipment and trained personnel and should not be construed to be a guarantee of performance. If the OSRO's inventory of equipment and personnel does not accurately reflect the information provided in the application, the Coast Guard will withdraw the classification letter and reclassify the OSRO to a level which appropriately reflects its inventory of resources.
- c. The OSRO should ensure that its equipment is in good operating condition, the preventive maintenance is performed as recommended by the manufacturer, that equipment is transportable, and that there is compatibility between system components. Equipment that is inoperable, not mobile or transportable, or that has incompatible system components may not be counted toward overall removal capacity for the purposes of classification. The verification team may consider, among other conditions, the following:

(1) Booms:

- (a) Overall condition
- (b) Evidence of ownership, lease, or subcontract
- (c) Type and quantity
- (d) Compatibility of connectors
- (e) Number and adequacy of anchors

- (f) Transportability
- (2) Recovery Devices:
 - (a) Skimmers and vacuum trucks
 - (b) Evidence of ownership, lease, or subcontract
 - (c) Type and throughput capacity
 - (d) Compatibility of components (hoses, suction and skimmer head, couplings, connectors, etc.)
 - (e) Operability and maintenance
 - (f) Condition of the prime mover
- (3) Temporary Storage Devices:
 - (a) Evidence of ownership, lease, or subcontract
 - (b) Capacity (twice daily recovery capacity)
 - (c) Inspected and maintained in accordance with manufacturer's recommendations
 - (d) Contracted barges with current certificates
 - (e) Prearranged shore-based storage capacity
- (4) Boats:
 - (a) Sufficient numbers of trailers, outboard motors and USCG-required safety equipment (life jackets, lights, etc.)
 - (b) Types and number of boats appropriate to the environment of the classification
- (5) Records:
 - (a) Equipment clearly marked for identification
 - (b) Records supporting claims of ownership, lease, or subcontract
 - (c) Complete maintenance records reflecting condition of the equipment
- (6) Other:
 - (a) Command, control, and communications equipment - should be available and adequate to the planned response

- (b) Dispersants and dispersant application equipment - should be maintained, ready for use, and adequate to the planned task
 - (c) Oil-water separators considered for optimizing storage capacity
 - (d) Other major equipment to facilitate removal of oil from the water or shorelines
 - (e) Tracking equipment and/or arrangements for helicopter aviation should be noted
 - (f) Lighting equipment, generators, etc. should be available (or arranged for) if the OSRO claims that it can work in darkness
- d. Prior to the Coast Guard's visit, the OSRO should check personnel records and subcontracting or consulting agreements to verify the number and availability of trained personnel listed in the application. Minimum training should include that required by 29 CFR 1910.120 (HAZWOPER). The numbers of personnel may vary from one OSRO to another, depending upon unique needs, classification, and the requirements of major equipment. However, the OSRO may use the following schedule to estimate the number of trained personnel needed to accomplish certain response tasks:
- (1) Boats: 2 people per boat
 - (2) Boom deployment: 2-5 people per 1000' of boom, depending upon overall height, weather, current, etc. (probably 2 in harbor environments and 5 in open ocean or high current)
 - (3) Skimmers: 1-3 people per skimmer, depending on configuration and operating requirements
 - (4) Storage devices: At least 1 person per storage device
- e. The OSRO should be prepared to demonstrate the readiness of its personnel resources, including the following:
- (1) Records should verify that training for oil spill response is in accordance with the requirements of 29 CFR 1910.120 (HAZWOPER).
 - (2) The number of trained personnel employed, subcontracted, or gained through consulting agreements should equal the resources identified by the OSRO in the application.

- (3) There should be a demonstrated capability to train sufficient numbers of "surge" personnel in the time allowed by the response classification for which the OSRO has applied.

Section C. CLASSIFICATIONS OF OSROs FOR RESPONSE TO SPILLS IN VARIOUS ENVIRONMENTS.

1. RIVER AND CANAL ENVIRONMENTS.

The minimum standards for classifying OSROs for planned response to spills in a rivers and canals environment are listed below and summarized in table 1. Basic equipment design parameters for planned response to spills in a rivers or canals environment are summarized in references (a) and (b) and will be considered in classifying an OSRO for response in these environments.

a. Class A - 50 Bbls/day Recovery

- (1) Containment boom: 2,000 feet minimum
- (2) Protective boom: 2,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.): 50 Bbls/day of planned recovery capacity
- (4) Recovered oil storage: Minimum 100 Bbls of temporary storage capacity

b. Class B - 1,250 Bbls/day Recovery

- (1) Containment boom: 4,000 feet minimum
- (2) Protective boom: 4,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.): Minimum 1,250 Bbls/day of planned recovery capacity
- (4) Recovered oil storage: Minimum 2,500 Bbls of temporary storage capacity

c. Class C - 1,500 Bbls/day Recovery

- (1) Containment boom: 4,000 feet minimum
- (2) Protective boom: 10,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.): Minimum 1,500 Bbls/day of planned recovery capacity
- (4) Recovered oil storage: Minimum 3,000 Bbls of temporary storage capacity

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- (1) Containment boom: 4,000 feet minimum.
- (2) Protective boom: 15,000 feet minimum.
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum 3,000 Bbls/day planned recovery capacity
- (4) Recovered oil storage: Minimum 6,000 Bbls of
temporary storage capacity

e. Class E - 6,000 Bbls/day Recovery

- (1) Containment boom: 4,000 feet minimum
- (2) Protective boom: 22,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum 6,000 Bbls/day planned recovery capacity
- (4) Recovered oil storage: Minimum 12,000 Bbls of
temporary storage capacity

2. NEARSHORE OR INLAND ENVIRONMENTS.

The minimum standards for classifying an OSRO for planned response to spills in a nearshore or inland environment are listed below and summarized in table 1. Basic equipment design parameters for planned response to spills in a nearshore or inland environment are summarized in references (a) and (b) and will be considered in classifying an OSRO for response in these environments.

a. Class A - 50 Bbls/day Recovery

- (1) Containment boom: 2,000 feet minimum
- (2) Protective boom: 6,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
50 Bbls/day planned recovery capacity
- (4) Recovered oil storage: Minimum 100 Bbls of
temporary storage capacity

b. Class B - 1,250 Bbls/day Recovery

- (1) Containment boom: 6,000 feet minimum
- (2) Protective boom: 6,000 feet minimum

12

Enclosure (1) to NVIC 12-92

- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum 1,250 Bbl/day planned recovery capacity.
- (4) Recovered oil storage: Minimum 2,500 Bbls temporary
storage capacity

c. Class C - 10,000 Bbls/day Recovery

- (1) Containment boom: 12,000 feet minimum
- (2) Protective boom: 12,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum planned recovery capacity of 10,000 Bbls/day
- (4) Recovered oil storage: Minimum 20,000 Bbls
temporary storage capacity

d. Class D - 20,000 Bbls/day Recovery

- (1) Containment boom: 18,000 feet minimum
- (2) Protective boom: 18,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum planned recovery capacity of 20,000 Bbls/day
- (4) Recovered oil storage: Minimum 40,000 Bbls
temporary storage capacity

e. Class E - 40,000 Bbls/day Recovery

- (1) Containment boom: 24,000 feet minimum
- (2) Protective boom: 24,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum planned recovery capacity of 40,000 Bbls/day
- (4) Recovered oil storage: Minimum 80,000 Bbls of
temporary storage capacity

3. GREAT LAKES ENVIRONMENT.

The minimum standards for classifying an OSRO for planned response to spills in a Great Lakes environment are listed below and summarized in table 1. Basic equipment design parameters for planned response to spills in a Great Lakes environment are summarized in references (a) and (b) and will be considered in classifying an OSRO for response in this environment.

a. Class A - 50 Bbls/day Recovery

- (1) Containment boom: 2,000 feet minimum
- (2) Protective boom: 6,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.): 50 Bbls/day planned recovery capacity
- (4) Recovered oil storage: Minimum 100 Bbls of temporary storage capacity

b. Class B - 1,250 Bbls/day Recovery

- (1) Containment boom: 6,000 feet minimum
- (2) Protective boom: 6,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.): Minimum 1,250 Bbl/day planned recovery capacity.
- (4) Recovered oil storage: Minimum 2,500 Bbls temporary storage capacity

c. Class C - 5,000 Bbls/day Recovery

- (1) Containment boom: 12,000 feet minimum
- (2) Protective boom: 12,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.): Minimum planned recovery capacity of 5,000 Bbls/day
- (4) Recovered oil storage: Minimum 10,000 Bbls storage capacity

d. Class D - 10,000 Bbls/day Recovery

- (1) Containment boom: 18,000 feet minimum
- (2) Protective boom: 18,000 feet minimum
- (3) Oil recovery equipment (skimmers, vacuums, etc.): Minimum planned recovery capacity of 10,000 Bbls/day
- (4) Recovered oil storage: Minimum 20,000 Bbls temporary storage capacity

e. Class E - 20,000 Bbls/day Recovery

- (1) Containment boom: 24,000 feet minimum
- (2) Protective boom: 24,000 feet minimum

- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum planned recovery capacity of 20,000 Bbls/day
- (4) Recovered oil storage: Minimum 40,000 Bbls of
temporary storage capacity

3. OFFSHORE AND OPEN OCEAN ENVIRONMENTS.

The minimum standards for classifying an OSRO for planned response to spills in an offshore or open ocean environment are listed below and summarized in table 1. Basic equipment design parameters for planned response to spills in an offshore or open ocean environment are summarized in references (a) and (b) and will be considered in classifying an OSRO for response in these environments.

a. Class A - 50 Bbls/day Recovery

- (1) Containment boom: 4,000 feet minimum
- (2) Protective boom: 6,000 feet minimum for offshore environment, none for open ocean
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
50 Bbls/day planned recovery capacity
- (4) Recovered oil storage: Minimum 100 Bbls of
temporary storage capacity

b. Class B - 1,250 Bbls Recovery

- (1) Containment boom: 8,000 feet minimum
- (2) Protective boom: 8,000 feet minimum for offshore environment, none for open ocean
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum 1,250 Bbls/day recovery capacity (half the planning volume)
- (4) Recovered oil storage: Minimum 2,500 Bbls of
temporary storage capacity

c. Class C - 10,000 Bbls/day Recovery

- (1) Containment boom: 12,000 feet minimum
- (2) Protective boom: 12,000 feet minimum for offshore environment, none for open ocean
- (3) Oil recovery equipment (skimmers, vacuums, etc.):
Minimum 10,000 Bbls/day planned recovery capacity

- (4) Recovered oil storage: Minimum 20,000 Bbls/day of temporary storage capacity

d. Class D - 20,000 Bbls/day Recovery

- (1) Containment boom: 18,000 feet minimum
- (2) Protective boom: 18,000 feet minimum for offshore environment, none for open ocean
- (3) Oil recovery equipment (skimmers, vacuums, etc.): Minimum 20,000 Bbls/day recovery capacity
- (4) Recovered oil storage: Minimum 40,000 Bbls of temporary storage capacity

e. Class E - 40,000 Bbl/day Recovery

- (1) Containment boom: 24,000 feet minimum
- (2) Protective boom: 24,000 feet minimum for offshore environment, none for open ocean
- (3) Oil recovery equipment (skimmers, vacuums, etc.): Minimum 40,000 Bbls/day recovery capacity
- (4) Recovered oil storage: Minimum 80,000 Bbls of temporary storage capacity

TABLE 1
RESOURCE QUANTITY MINIMUMS FOR OSRO CLASSIFICATION*

CLASSIFICATION BY ENVIRONMENT	CLASS A	CLASS B	CLASS C	CLASS D	CLASS E
Containment Boom/Protective Boom (Thousand Feet)					
Rivers and Canals	2/2	4/4	4/10	4/16	4/22
Nearshore, Inland	2/6	6/6	12/12	18/18	24/24
Great Lakes	2/6	6/6	12/12	18/18	24/24
Offshore	4/6	8/8	12/12	18/18	24/24
Open Ocean**	4/	8/	12/	18/	24/
Effective Daily Recovery Capacities (Barrels per day) (Z required to be Shallow Draft Capable)***					
Rivers and Canals (20%)	50	1,250	1,500	3,000	6,000
Nearshore, Inland (20%)	50	1,250	10,000	20,000	40,000
Great Lakes (20%)	50	1,250	5,000	10,000	20,000
Offshore (10%)	50	1,250	10,000	20,000	40,000
Open Ocean (None)	50	1,250	10,000	20,000	40,000
Oil Storage Capacity (Barrels) (Z required to be Shallow Draft Capable)***					
Rivers and Canals (20%)	100	2,500	3,000	6,000	12,000
Nearshore, Inland (20%)	100	2,500	20,000	40,000	80,000
Great Lakes (20%)	100	2,500	10,000	20,000	40,000
Offshore (10%)	100	2,500	20,000	40,000	80,000
Open Ocean (None)	100	2,500	20,000	40,000	80,000

* See Enclosure (1) to NVICs 7-92 or 8-92 for a complete description of resource requirements for response planning.

** Protective Boom not required for Open Ocean environments.

*** Shallow draft minimums refer to requirements that a certain minimum portion of equipment be capable of operating in water depths of 6 feet or less. Note that response planning for ANPD and MMPD size spills requires that all equipment be capable of operating in the applicable environment.

Appendix A

**RECOMMENDED APPLICATION FORMAT FOR CLASSIFICATION AS AN
OIL SPILL REMOVAL ORGANIZATION (OSRO)**

Name of OSRO:

Primary Contact:

Telephone #:() --

Facsimile #:() --

Mailing Address:

Location, as defined in section 2, paragraph 1.c. of enclosure (1), for which classification is sought:

Latitude _____ ° _____ ' _____ " North.

Longitude _____ ° _____ ' _____ " West

Using the inventory and equipment worksheets, provide the following information for each response location:

BOOM SUMMARY: (total feet of boom with compatible connectors)

Containment boom:

	Owned	Under Contract
6-18"	_____ ft	_____ ft
18-42"	_____ ft	_____ ft
>42"	_____ ft	_____ ft

6-18"	River, harbor
18-42"	Nearshore
>42"	Ocean

Protective boom:

6-18"	River, harbor	_____ ft	_____ ft
18-42"	Nearshore	_____ ft	_____ ft

PERSONNEL SUMMARY: For each category at this location, list the number of personnel with HAZWOPER training who are: full-time-employees or available through subcontract or consulting-agreement.

Supervisors	Full Time: _____	Part Time: _____
Technicians/Operators	Full Time: _____	Part Time: _____
Support/General Labor	Full Time: _____	Part Time: _____

Enclosure (1) to NVIC 12-92.

EFFECTIVE DAILY RECOVERY CAPACITY available at this location:

Shallow Water Capable: _____ BPD. Total: _____ BPD.

TEMPORARY STORAGE CAPACITY available at this location:

Shallow Water Capable: _____ BPD. Total: _____ BPD.

BOATS: The number and type of vessels for use in oil spill response, in each environment for which classification is sought, should be listed in the order of increasing size (i.e., length, displacement, etc).

REMARKS: Include any comments including limitations on the availability or use of the above equipment. Equipment contracted for but not yet delivered could be identified here and the contracted delivery date noted.

SIGNATURE AND UNDERSTANDING REGARDING INSPECTION BY COAST GUARD PERSONNEL: An officer or senior official of the OSRO should include a signed statement with the application, attesting to the validity of the information provided. Coast Guard personnel may visit the OSRO and verify that the resources listed in the application exist as represented.

ENCLOSURE WITH VIC 12-92.

Introduction

100-443886

11

- ```

TYPE: 1 VESSEL-MOUNTED BOW GRINDER
 2 VESSEL-MOUNTED SIDE GRINDER
 3 BURSING BOOM/OIL TANK SYSTEM
 4 OLEOPNEUMATIC STOW OR DRAW
 5 OLEOPNEUMATIC HOPE, HOP OR BELT
 6 FLOATING SUCTION (List vacuum trucks if applicable)
 7 INCLUDED PLANT
 8 PADDLE WHEEL
 9 OTHER

```

**OIL SPILL REMOVAL ORGANIZATION  
CLASSIFICATION WORKSHEET:**

## TEMPORARY STORAGE SYSTEMS

This form summarizes the temporary storage capabilities of an OSRO. Storage systems include bladders, inflatable barges, tank barges, lined hopper barges, tanks, etc. <sup>1</sup>Notes: Response Plans require a certain percentage of storage systems to be shallow water capable. Therefore, the amount that is shallow water capable should be noted.

## OIL STORAGE SYSTEMS

[illegible]

- TYPES: 1 Draceno or Bladder**  
**2 Portable Tank**  
**3 Barge**  
**4 Internal Tanks on Vessel**  
**5 Other**

ENCLOSURE (1) to NWIC 12--92.

# OSRO Classification

• Underwater Technics, Inc.  
Camden, NJ  
R/C

## Level D

• AAA Coastal Pollution Cleanup

Tampa, FL  
I/N

• Delaware Bay and River  
Cooperative, Inc.  
Lewes, DE  
I/N

Emergency Environmental Services,  
Inc.  
Oakridge, NY  
I/N

Environmental Recovery Group,  
Ltd.  
Atlantic Beach, FL  
I/N

• Florida Spill Response  
Corporation  
Cocoa, FL  
I/N

Industrial Cleaners, Inc. &  
Associated Gulf Coast  
Responders  
Wauvega, LA  
O/OO

• Ken's Marine Service  
Beyonne, NJ  
R/C

## Level C

• American Industrial Marine  
Services  
Fieldfield, NJ  
I/N

• Gerner Environmental Services  
Houston, TX  
I/N

• GEM Environmental, Inc.  
Valley Forge, PA  
I/N

• Guardian Environmental Services  
Bee, DE  
R/C

Heritage Remediation/Engineering,  
Inc.  
Romeoville, IL  
I/N

• Ken's Marine Service  
Beyonne, NJ  
I/N

• Miller Environmental Group, Inc.  
Calverton, NY  
I/N

• OHM Remediation Services Corp.  
Findlay, OH  
I/N, GL

Oil Spill Service Center  
Southampton, UK  
I/N, GL, O/OO

So. Cal. Ship Services  
Long Beach, CA  
R/C

• Thompson Environmental Mgt.,  
Inc.  
New Orleans, LA  
R/C

• Underwater Technics, Inc.  
Camden, NJ  
I/N

Waverly Environmental Group  
Cannonsburg, PA  
R/C

## Level B

• Acme Products Co.  
Tulsa, OK  
R/C, I/N

Bay West, Inc.  
St. Paul, MN  
R/C

• Clean America, Inc.  
Baltimore, MD  
R/C

Clean Cases Bay  
Portland, ME  
I/N

• Clean Venture, Inc.  
Perth Amboy, NJ  
I/N

• Corpus Christi Area Oil Spill  
Assess.  
Corpus Christi, TX  
R/C, I/N

Crowley Environmental Services  
San Juan, PR  
I/N

Cyn Oil Corporation  
Saugus, MA  
R/C, I/N

Diversified Environmental Services,  
Inc.  
Tampa, FL  
R/C, I/N

Environmental Products & Services  
Syracuse, NY  
GL, I/N

• Guardian Environmental Services  
Bee, DE  
I/N

Inland Water Response Network,  
Inc.  
Huntington, WV  
I/N

Pacific Affiliates Environmental  
Engineering, Inc.  
Riverside, CA  
R/C, I/N

Pacific Environmental Corporation  
(OEIA FENCO)  
Honolulu, HI  
R/C, I/N

Sea Spill South, Inc.  
St. Petersburg, FL  
R/C, I/N

Spill Response, Inc.  
Edna, TX  
R/C

• Thompson Environmental Mgt.,  
Inc.  
New Orleans, LA  
I/N

• Thompson Environmental Mgt.,  
Inc.  
New Orleans, LA  
I/N

• Thompson Environmental Mgt.,  
Inc.  
New Orleans, LA  
I/N

AAA Oil Pollution Specialists, Inc.  
Long Island City, NY  
I/N

Boston Line and Service Co.,  
Boston, MA  
R/C, I/N

• Brand Precision Services  
Huber Heights, OH  
R/C, I/N

• CENAC Environmental Services  
Houston, LA  
R/C

• Clean America, Inc.  
Baltimore, MD  
I/N

• Contractor Environmental  
Equipment Co.  
Paducah, KY  
R/C, I/N

Cosmos Waste Control Corporation  
Tolima, OH  
R/C, I/N, GL

Environmental Equipment, Inc.  
Houston, LA  
R/C, I/N

Marine USA, Inc.  
Broussard, LA  
R/C, I/N

Miller Environmental Services  
Corpus Christi, TX  
R/C, I/N

Oil Recovery Company, Inc.  
Mobile, LA  
R/C, I/N

• PetroChem Recovery Services,  
Inc.  
Norfolk, VA  
R/C

Robert Environmental Services  
New Orleans, LA  
R/C, I/N

Seasons Ocean Services, Inc.  
Portland, ME  
R/C, I/N

• Southeast Response and  
Remediation, Inc.  
Wilmington, NC  
R/C, I/N

So. Cal. Ship Services  
Long Beach, CA  
I/N

• Spill Recovery of Indiana  
Indianapolis, IN  
R/C

Spill Response, Inc.  
Edna, TX  
I/N

Transide Marine Corporation  
Oxnard, CA  
I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

Western Oil Inc.  
Pawtucket, RI  
R/C, I/N

R/C Rivers/Canals  
I/N Inland/Nearshore  
O/OO: Offshore/Open Ocean  
GL: Great Lakes  
FF: Final Classification received

## Events

(continued)

(SNAME) Annual Meeting is an international forum for presenting and discussing technical papers on naval architecture and marine engineering subjects. The theme of the 1994 meeting is "Ship Design and Operation in Harmony with the Environment." A symposium held in conjunction with the Annual Meeting will address environmental issues dealing with design, retrofit, operation, pollution control technologies, and environmental regulatory compliance.

To make a presentation at the Meeting's Technical Program, send a 400-500 word proposal and a tentative outline to the Publications Coordinator, SNAME, 601 Pavonia Avenue, Jersey City, NJ 07306. Telephone (201) 798-4800; Fax (201) 798-4973. Deadlines are: abstract, December 15, 1993; smooth draft for Papers Committee approval, May 15, 1994; camera-ready copy for publication, August 15, 1994. ♦

Listed on the following pages are Oil Spill Removal Organizations (OSROs) that have been granted Interim and Final Classification by the National Strike Force Coordinating Center (NSFCC) as of November 8, 1993.

A bullet (•) indicates that Final Classification has been received via on-site inspections by USCG Strike Team Personnel.

Classification categories are assigned according to the organization's recovery capacity. Level E represents the highest recovery capacity, and Level A represents the lowest recovery capacity.

For additional information, contact T. Shuey at NSFCC, (919) 331-6030.

## OSRO Classification

### Level E

ABA Coastal Pollution Cleanup  
Tampa, FL  
R/C

AMBAR/Oil Mon. Inc.  
Bella Chase, LA  
R/C, I/N

Alysea Pipeline Service Co.  
Valdez, AK  
I/N, O/OO

American Industrial Marine Services  
Fairfield, NJ  
R/C

Clean Bay, Inc.  
Concord, CA  
R/C, I/N, O/OO

Clean Channel Associates  
Houston, TX  
R/C, I/N

Clean Coastal Waters, Inc.  
Long Beach, CA  
R/C, I/N, O/OO

Clean Harbors Cooperative  
Edison, NJ  
R/C, I/N, GL

Clean Harbors Environmental Services, Inc.  
Braintree, MA  
R/C, I/N, GL

Clean Seas  
Corpus Christi, CA  
I/N, O/OO

Clean Sound Cooperative, Inc.  
Edmonds, WA  
I/N, O/OO

Clean Venture, Inc.  
Perth Amboy, NJ  
R/C

CNE Barry, Inc.  
Fort Lauderdale, FL  
R/C, I/N

Coastal Divers and Pollution Control  
Savannah, GA  
R/C, I/N

Coastal Oil Spill Response Organization (COSRO)  
North Haven, CT  
R/C, I/N

Cook Inlet Spill Prevention and Response  
Nikiski, AK  
R/C, I/N, O/OO

Delaware Bay and River Cooperative, Inc.  
Lewes, DE  
R/C

EAK Hazardous Waste Services  
Sheboygan, WI  
R/C, I/N, GL

Emergency Environmental Services, Inc.  
Ossining, NY  
R/C

Environmental Products & Services  
Syracuse, NY  
R/C

Environmental Recovery Group, Ltd.  
Atlantic Beach, FL  
R/C

Fenn-Vee, Inc.  
North Charleston, SC  
R/C, I/N

Florida Spill Response Corporation  
Cocoa, FL  
R/C

Form Environmental Services, Co.  
Seattle, WA  
R/C, I/N

Gannett Environmental Services  
Houston, TX  
R/C

GEM Environmental, Inc.  
Valley Forge, PA  
R/C

Heritage Remediation/Engineering, Inc.  
Romeoville, IL  
R/C

Industrial Cleanup, Inc. & Associated Gulf Coast Response  
Westwego, LA  
R/C, I/N

Industrial Marine Service, Inc.  
Norfolk, VA  
R/C, I/N

Inland Water Response Network, Inc.  
Huntington, WV  
R/C

Jacksonville Pollution Control  
Jacksonville, FL  
R/C, I/N

LARCO Environmental Services  
Lake Charles, LA  
R/C, I/N

Marine Pollution Control  
Detroit, MI  
R/C, I/N, GL

Marine Spill Response Corp.  
Washington, DC  
R/C, I/N, O/OO

Miller Environmental Group Inc.  
Calverton, NY  
R/C

National Response Corporation  
Calverton, NY  
R/C, I/N, O/OO

OHM Remediation Services Corp.  
Findlay, OH  
R/C

Riedel Environmental Services  
New Orleans, LA  
R/C, I/N

R/C: Rivers/Canals  
I/N: Inland/Nearshore  
O/OO: Offshore/Open Ocean  
GL: Great Lakes  
•: Final Classification

## VII. U. S. EPA CONTRACTORS

### 1. U. S. EPA Contractors

- a) Dioxin Analytical Contract  
Meta Trace Inc.  
13715 Rider Trail North  
Earth City, MO 63045 (314) 298-8566
- b) Dioxin Bag Contract  
Bulk Lift International, Inc.  
231 W. Main, Suite 305  
Carpentersville, IL 60110 (312) 428-6059
- c) Dioxin Building Contract (8A Contractor)  
Crown Construction Company  
1276 St. Cyr, Suite 124  
St. Louis, MO 63137 (314) 867-8027
- d) Dioxin Excavation Contract  
Riedel Environmental Services, Inc.  
18207 Edison  
Chesterfield, MO 63005 (314) 532-7660  
or  
P.O. Box 5007  
Portland, Oregon 97208 (800) 334-0004
- e) Emergency Response Cleanup Services (ERCS)  
Riedel Environmental Services, Inc.  
18207 Edison  
Chesterfield, MO 63005 (314) 532-7660
- f) Field Investigation Team (FIT)  
Ecology & Environment, Inc.  
6405 Metcalf #3, Suite 404  
Overland Park, KS 66202  
John Casile (FITL) (913) 432-3961 (Bus)  
(816) 322-4575 (Res)
- g) REM II  
Camp Dresser and McGee (Prime)  
8215 Melrose Drive, Suite 100  
Lenexa, KS 66214  
Mark Svatek (913) 492-8181
- h) REM IV  
CH2M HILL (Prime)  
310 W. Wisconsin Ave., Suite 700-E  
Milwaukee, WI 53203  
John Fleissner (414) 272-2426
- Black & Veatch  
P. O. Box 8405  
Kansas City, MO 64114  
Dick Kaufman (816) 339-2000

## VII. U. S. EPA CONTRACTORS

### 1. U. S. EPA Contractors (continued)

#### 1) Technical Assistance Team (TAT 7)

Ecology & Environment, Inc.

6405 Metcalf #3, Suite 404

Overland Park, KS 66202

Joe Chandler (TATL)

(913) 432-9961 (Bus)

(913) 829-1384 (Res)

(816) 395-0757 (Pager)

St. Louis Office:

1900 Craigshire

St. Louis, Mo. 63146

Bob Skirvan (ATATL)

(314) 576-0018

(314) 227-0735 (Res)

#### 1) TES IV

Jacobs Engineering Group Inc. (Prime)

10901 West 84 Terrace, Suite 210

Lenexa, KS 66214

Steve Hauser or Gary Parker

(913) 492-9218

Tetra Tech

400 State Ave., Suite 306

Kansas City, KS. 66101

Russ Krohn

(913) 621-6042

DFRA

(913) 321-0869

or (913) 321-0872

### 2. ERCS Contractors, Other Regions

#### Zone 1 (EPA Regions 1-3)

O. H. Materials

16406 U.S. Route 224 East

P. O. Box 551

Findlay, OH 45840

(419) 423-3526

#### Zone 2 (EPA Region 4)

O. H. Materials

16406 U. S. Route 224 East

P. O. Box 551

Findlay, OH 45840

(419) 423-3526

#### Zone 3 (EPA Region 5)

PEI Assoc. Inc.

11499 Chester Rd.

Cincinnati, OH 45246

(800) 372-3727

(24-hour Emergency)

(513) 782-4700 (Bus)

## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 1. In-Region Clean-up Contractors

**Americo**  
Rt. 1, Box 159  
Kingsville, MO 64061  
(816) 732-5591  
(816) 732-6563 (24 hrs)

**Amino Brothers Co., Inc.**  
8110 Kaw Drive  
P.O. Box 11277  
Kansas City, Kansas 66111  
(General Response Service)  
(913) 287-8557  
(913) 334-2330

**Aptus**  
P. O. Box 907  
Coffeyville, KS 67337  
(316) 251-6380

**Ashland Chemical**  
7710 Polk St.  
St. Louis, MO 63111  
and  
5420 Speaker Rd.  
Kansas City, KS 66106  
(314) 638-7400  
(913) 371-3740

Wastes accepted: acids. chromic acids.  
pickling acids. caustics. cyanides.  
paints and inks. solvents (halogenated  
and non-halogenated), waste oil,  
commercial chemical products. non-  
metallic and metallic inorganics.  
metallic organics. halogenated organics.  
and contaminated soil.

**Central States Environmental Services Inc.**  
319 E. Seventh Street  
Centralia, IL 62801  
Dave Pritchard  
(618) 532-4784

**Double Check**  
4614 Prospect  
Kansas City, Mo.  
(816) 921-5032

**Environmental Int'l., Inc.**  
912 Scott  
Kansas City, Kansas 66104  
(913) 321-3155

**Interstate Environmental Services**  
6300 Stadium Drive  
Kansas City, MO 64129  
(816) 921-5511

**Delta Environmental**  
303 S. Main  
Sikeston, MO 63801  
Darrel Pullen  
(314) 471-7041

# VIII. CLEAN-UP & DISPOSAL CONTRACTORS

## 1. In-Region Clean-up Contractors (continued)

Environmental Protection Inspection & Consultory, Inc. (EPIC)

450 Dains St.

P. O. Box 541

Liberty, MO 64068

(816) 781-7755

ETI

4315 Merriam Drive

Overland Park, KS 66203

(913) 236-5040

(913) 791-2702 (24 hours)

(816) 223-1065 (mobile)

Pagers:

(816) 333-2610

(816) 881-9759

Mike Franano

(913) 831-9778

(816) 247-6489

Evans Engineering Co.

(712) 328-1511

807 S. 21st Street

Council Bluffs, IA 51501

Industrial Services

6201 North 70th

Lincoln, NE 68517

(402) 467-3581

(402) 435-4528 (24 hrs)

(answer machine, ask )

Phil Knaub

Butch

Dennis

Phil Knaub

O. H. Materials

42 North Central Drive

O'Fallon, MO 63366

(314) 272-3303

(800) 537-9540 (24 hrs)

FAX: (314) 272-3447

Odesco Industrial Services

100 Washington Ave.

S. Roxanna, IL 62087-0862

(314) 878-8191

Heritage Remediation/Engineering

183 McDonnell Blvd

St. Louis, MO 63042

(314) 521-3600

React, Division of D. W. Ryckman & Assoc. Inc.

P. O. Box 27310

St. Louis, MO. 63141

(314) 569-0991 (24 hr)

or: (800) 325-1398

Ricky Shaw & Sons Transportation Co.

500 Bennington

Kansas City, MO 64125

(816) 241-5444



## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 1. In-Region Clean-up Contractors (continued)

Riedel Environmental Services, Inc.  
18207 Edison Ave.  
Chesterfield, MO 63005 (314) 532-7660  
(800) 334-3004

Safety - Klean Corporation  
RR 2, Box 128A  
Grand Island, NE 68801 (308) 384-1616  
Goering, NE 69341 (308) 436-2600  
Omaha, NE 68144- (402) 333-5321  
Mason City, IA (515) 423-3030  
Des Moines, IA (515) 986-4100

Riedel Solvent Recovery Corp. (Industrial Waste Management, Inc.)  
716 Mulberry  
P. O. Box 4035  
Kansas City, MO 64101 (816) 474-1391 (24 hrs)

Total Environmental Services  
(Deffenbaugh Disposal Service)  
Dwight Brinkley (913) 631-2407  
(913) 631-3181 (24 hrs)

Tipton Environmental Technology  
U. S. 50-E Highway  
P. O. Box 849  
Tipton, MO 65081 (816) 433-5585

Americo, Kansas City  
901 Woodswether Rd.  
- Kansas City, MO 64101 (816) 471-6642

Van Waters and Rogers  
P. O. Box 7900  
3900 D Street  
Omaha, NE 68107 (402) 733-3266 or 7007

### 2. Clean-up/Disposal Contractors Outside Region

CECOS Environmental Services  
4879 Spring Grove Ave.  
Cincinnati, OH 45232 (513) 681-5738 (24 hrs)

Williamsburg, Ohio Disposal Facility:  
(800) 543-0274  
(513) 489-8742 (24 hrs)

Livingston, Louisiana Disposal Facility:  
(800) 452-7622  
(504) 686-0122

## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 2. Clean-up/Disposal Contractors Outside Region (continued)

#### Chemical Waste Management, Inc.

ENRAC Division(clean-up)

3003 Butterfield Road

Oak Brook, IL 60521

Roger Star (Disposal)

(312) 218-1544

Mark Medick

(312) 218-1554

Chicago Incinerator:

(800) 722-9999

Emelle, Alabama:

(205) 652-9721

#### Clean Sites Inc. (non-profit cleanup)

1199 North Fairfax St.

Alexandria, VA 22314

(703) 683-8522

#### Emergency Response Sec.

Calgon Activated

Carbon Division

4343 Commerce Court, Suite 400

Lisle, IL 60532

(312) 505-1919

#### Emergency Technical Services Corporation of Illinois

P. O. Box 941145

Schaumburg, IL 60194

Irv Kraut, Vice President

(312) 984-1230

Specialize in disposal of highly reactive  
and explosive chemicals in high-hazard or  
emergency situations. Services include  
assessment, packaging, transportation and  
disposal.

#### Environmental Systems Company (ENSCO)

American Rd.

El Dorado, AR 71730

(501) 863-7173

#### Enviro Save Services of Idaho, Inc.

Missile Base Rd.

Grandview, ID 83624

(208) 384-1500

Waste accepted: Acids/corrosives, metals  
cyanides, PCBs and solvents.

#### Enviro Save Services

876 Otter Creek Road

Oregon, OR 97361

James E. Hamilton

(419) 255-5100

## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 2. Clean-up/Disposal Contractors Outside Region (continued)

Response time to Iowa is a few hours for emergencies. a. day or so for non-emergencies. Oil and hazardous materials incidents. Adequate manpower and equipment. Clean-up of hazardous waste sites.

Hastach(Westinghouse)  
5280 Panoia Industrial Blvd.  
Decatur. GA 30035

(404) 981-9332  
(404) 981-9339 (24 hr)

Hulchar Emergency Services (Railroad Derailments)  
611 Kimberly Drive  
P. O. Box 271  
Denton. TX 76202-0271

(800) 637-5471

Odasco Industrial Services  
P.O. Box 862  
100 Washington  
S. Roxanna. IL 620887

(314) 878-3191

Peoria Disposal Co.  
4700 N. Sterling  
Peoria. IL 61615

(309) 688-0760

Petrochem  
- P.O. Box 337  
Lamont. IL 60439

(312) 739-1150

Wastes accepted: Commercial chemicals.  
non-metallic and metallic inorganics.  
non-halogenated organics. processing  
water. contaminated water. oil- and  
metal-bearing aqueous wastes, wastewater  
filter cakes. and arc dust.

Rollins Environmental Services (Cleanup/Disposal)  
P. O. Box 45212  
Dept. 123

Baton Rouge, LA 70895

(504) 292-4922

Scenic Highway Facility,

Baton Rouge Security

(504) 778-1234

Deer Park. Tx. incinerator

(713) 479-6001

Chemical Waste Management (formerly TWI)  
150 W. 137th St.  
Riverdale. IL 60627

(312) 841-8360

## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 2. Clean-up/Disposal Contractors Outside Region (continued)

Wastes accepted: Paints and inks,  
solvents (non-halogenated and  
halogenated), commercial chemical  
products, metallic organics (on a case-  
by case basis), halogenated and non-  
halogenated organics, infectious and  
pathological wastes, scintillation vials  
and lab packs.

#### Trade Waste Incineration

7 Mobile Ave

Sauger, IL 62201

Terry Johnson (contact)

(618) 271-2804

#### U. S. Ecology

9200 Shelbyville Road. Suite 300

Louisville, KY 40222

Beatty, NV Site

(502) 426-7160

#### U. S. Pollution Control

2000 Classen Center

Suite 400 S.

Oklahoma City, OK 73106

Grassy Mt., UT Facility

Waynoka, OK Facility

(405) 528-8371

(405) 528-8371

(405) 697-3237

#### Weston Services Inc.

Weston Way

Westchester, PA 19380

(215) 692-3030

## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 3. Equipment Available for Loan by Industry & Commercial Sources:

#### COMPANY & LOCATION

#### SERVICES & EQUIPMENT

ADM  
Red Wing, MN  
(612) 388-7111  
Dave Turner

Boom, sorbents skimmer, hose  
and boat

Amoco Oil Co. Terminals:  
75 31st Street  
Bettendorf, IA 52722  
(319) 353-2686 Bus. Hrs.  
(319) 386-0853 After Hrs.  
Lynn Talcott

Absorbent material and rope-on-  
replacement basis. Motor boat  
available.

829 E. South Omaha  
Bridge Road  
Council Bluffs, IA 51503  
(near NCR terminal)  
(712) 366-9462 (24 hr)  
Norman Neuernburg

Equipment & personnel for  
petroleum recovery.  
Portable filter pump  
available. Absorbent  
materials on a replacement  
basis.

1501 NW 86th  
Des Moines, IA 50311  
(515) 225-4017 (bus. hrs)  
(515) 225-4021 (ans. serv.)  
G. L. Landry

Oil clean-up supplies, 3M  
absorbent, containment  
barriers - on a replacement  
basis.

- Ashland Petroleum  
St. Paul, MN  
(612) 459-9771  
Doug Fisher

Boom, sorbents, skimmer, vacuum,  
pump and boat.

Barton Enterprises  
Newport, MN  
(612) 739-4675  
Mike Mahoney

Boom and sorbents.

J. D. Brennan Co., Inc.  
La Crosse, WI  
(608) 784-7143  
(see La Crosse Oil Spill Corp)

Broski Brothers Co., Inc.  
3915 Fuller  
Kansas City, Missouri 64129  
(816) 861-8000

Manufacturer, Supplier, and  
Installation of Chain-Link.  
Fence Fabric and Gates

CF Industries  
Rosemount, MN  
(612) 437-6366  
(612) 437-4545

## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 3. Equipment Available for Loan by Industry & Commercial Sources (continued)

| <u>COMPANY &amp; LOCATION</u>                                                                                                               | <u>SERVICES &amp; EQUIPMENT</u>                    |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| CF Warehouse<br>Rosemount, MN<br>(612) 437-6191<br>Tillman Weathersbee                                                                      |                                                    |
| Calgon Mobile Treatment Serv.<br>Calgon Center<br>P. O. Box 1346<br>Pittsburg, PA 15230<br>(412) 777-8000<br>(312) 505-1919<br>Salil K. Sen | Carbon treatment systems.                          |
| Cape Girardeau Coop.<br>Cape Girardeau, MO<br>(314) 335-6685<br>Robert Erlbacher                                                            | Boom, skimmer, hose, barge<br>and boat with motor. |
| Crest Associates<br>2905 Pillsbury Avenue<br>Minneapolis, MN 55408<br>(612) 872-8668                                                        | Equipment only: sorbents,<br>booms, sweeps, etc.   |
| Dairyland Pover Coop.<br>Gaona, WI<br>(608) 788-4000<br>(608) 788-4006<br>(see La Crosse Oil Spill Coop)                                    |                                                    |
| Day-Star<br>1544 Howell<br>North Kansas City, MO 64116<br>(816) 221-1401                                                                    |                                                    |
| Erickson Petroleum<br>Newport, MN<br>(612) 459-4307                                                                                         | Boom and boat.                                     |
| Gard Oil Products, Inc.<br>2727 Roe<br>Kansas City, KS 66103<br>(913) 236-5000                                                              | Sorbents, booms.                                   |
| Hawkins Chemical<br>Minneapolis, MN<br>(612) 331-6910<br>Tom Dellich                                                                        | Chemicals                                          |

# VIII. CLEAN-UP & DISPOSAL CONTRACTORS

## 3. Equipment Available for Loan by Industry & Commercial Sources (continued)

| <u>COMPANY &amp; LOCATION</u>                                                                                                                                                                                                                                                                                                                     | <u>SERVICES &amp; EQUIPMENT</u>                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Hazco Services, Inc.<br/>2006 Springboro West Road<br/>P. O. Box 2635<br/>Dayton, OH 45439<br/>(513) 293-2700<br/>(800) 332-0435</p>                                                                                                                                                                                                           | <p>Equipment and trailers</p>                                                                                                                                                                                                    |
| <p>Holland Bros. Cons. Co., Inc.<br/>Highway 9 West<br/>Decorah, Iowa 52101<br/>(319) 382-2901<br/>(319) 382-2412</p>                                                                                                                                                                                                                             | <p>Grading, Embankment, Excavation,<br/>Clearing, Grubbing, and<br/>Demolition</p>                                                                                                                                               |
| <p>Hydrite Chemical<br/>La Crosse, WI<br/>(612) 784-0024<br/>(see La Crosse Oil Spill Coop)</p>                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                  |
| <p>ITAPCO-Missouri<br/>Terminal, Inc.<br/>Cape Girardeau, MO<br/>(314) 335-6688<br/>Allen Moore</p>                                                                                                                                                                                                                                               | <p>Boom and sorbents.</p>                                                                                                                                                                                                        |
| <p>Illinois Chemical Corp.<br/>P. O. Box 2116<br/>Highland Park, IL 60035<br/>(312) 433-1145<br/>(all counties along<br/>Mississippi River)<br/>William B. Katz<br/>Joe Jacobson<br/>(all Iowa except counties<br/>along Mississippi River)<br/>St. Louis Office<br/>5217 Caribee Dr.<br/>St. Louis, MO 63128<br/>Robert Moore (314) 487-3139</p> | <p>Oil spill equipment specialist.<br/>Maintains large stocks of:<br/>sorbents, including imbibor<br/>beads, and can arrange immediate<br/>shipment of containment boom<br/>and skimmers. Consultant to<br/>Barton Solvents.</p> |
| <p>Iowa Safety Equipment Co.<br/>1206 Grand Avenue<br/>Des Moines, IA 50309<br/>(515) 276-3765 (bus. hrs.)<br/>(515) 987-4331 (after hrs.)<br/>Bill Lefler, Jr.</p>                                                                                                                                                                               | <p>Equipment only, such as 3M oil<br/>sorbents, booms, sweeps, pads,<br/>protective clothing, gas masks,<br/>SCBA, respirators, steel toe<br/>rubber boots, personal safety<br/>equipment.</p>                                   |

# VIII. CLEAN-UP & DISPOSAL CONTRACTORS

## 3. Equipment Available for Loan by Industry & Commercial Sources (continued)

| <u>COMPANY &amp; LOCATION</u>                                                                                                                     | <u>SERVICES &amp; EQUIPMENT</u>                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| J.E. Berre Const. Co., Inc.<br>5091 New Baumgartner Road<br>St. Louis, MO 63129<br>(314) 487-5617                                                 | General Response Service and<br>also Marine Transporter.                |
| Kehe Const. Co.<br>2700 5th Ave. N.W.<br>Box 827<br>Waverly, Iowa 50677<br>(319) 352-3212                                                         | General construction<br>service Iowa Only                               |
| Kelso Chemical Co.<br>1801 N. 1st Street<br>Lincoln, NE 68508<br>(402) 475-7036                                                                   | Equipment only, sorbents,<br>booms, sweeps, etc.                        |
| Koch Fuels<br>St. Paul, MN<br>(612) 227-7106<br>Mike Savage                                                                                       | Boom, sorbents, boat with<br>motor, spill collection truck.             |
| Koch Refinery<br>(Barge Slip)<br>Rosemount, MN<br>(612) 437-0700<br>Tom Seiger                                                                    | Boom, sorbents, and boat.                                               |
| Koch Refinery<br>Spill Control Coop.<br>(Equipment stored at<br>Koch Fuels #2)<br>(612) 227-7106 (office)<br>(612) 738-8699 (home)<br>Mike Savage | Boom, sorbents, skimmer,<br>pumps, hoses, and boat.                     |
| La Crosse Oil Spill<br>Coop. (Equipment stored<br>at NSP Plant-French Island)<br>(608) 782-3670<br>Kent Pehler                                    | Boom, sorbents, skimmer,<br>hose, and boat.                             |
| Liomark, Inc. and Subsidiaries.<br>1620 Woodson Road<br>St. Louis, MO 63114<br>(314) 991-2180                                                     | Land of subsurface excavations,<br>all types of trucking and<br>hauling |



## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### • Equipment Available for Loan by Industry & Commercial Sources. (continued):

OC

**COMPANY & LOCATION**

### SERVICES & EQUIPMENT

Midwest Industrial Fuels, Inc.  
La Crosse, WI  
(608) 782-3308  
Joe Gaspers

Boom, sorbents, skimmer,  
hose and boat.

**Minnesota Mining and  
Manufacturing (3M)  
Environmental Specialties  
Occupational Health and  
Safety Products Division  
220-74-02  
St. Paul, MN 55144  
(612) 733-6100**

Equipment only, sorbents,  
booms, sweeps, etc.

**Chicago Branch Sales Center**  
**6850 South Harlem Avenue**  
**(Bedford Park) Argo, IL 60501**  
**(312) 496-6666 (J. E. Matt, Safety Director)**  
**(312) 598-6692 (M. Doody, Branch Sales, Warehouse (Foam))**  
**(312) 458-9194 (C Hupke, Branch sales, Warehouse)**  
**(312) 238-2935 (R. Rafferty, Branch Office Administration)**  
**(815) 597-3761 (L. Nelson, Superintendent, Rockford Branch)**

600 E. Meigs Street  
Valley, NE 68064  
(402) 359-2131

**Mobil**  
**La Crosse, WI**  
**(608) 782-1850**  
**Ron Sanders-(608) 784-5460**  
**Bob Johnson**

### Boom and sorbance.

Mobil Oil  
St. Paul, MN  
(612) 227-0731  
Harry Thompson

## Boom and sorbents.

Northern States Power  
French Island  
La Crosse, WI  
(608) 782-6526  
Keith Anderson  
(see La Crosse Oil Spill Coop)

## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 3. Equipment Available for Loan By Industry & Commercial Sources (continued)

#### COMPANY & LOCATION

#### SERVICES & EQUIPMENT

Packer River Terminal  
Minneapolis, MN  
(612) 588-8141  
Tim Pribil

Boom and sorbents.

Petroleum Equipment and  
Service, Inc.  
P.O. Box 160  
220 35th Street  
Marion, IA 52302  
(319) 377-6357 (24 hrs.)  
(319) 377-6606 (aft. hrs.)  
Bernie Cooper  
(319) 377-1478 (aft. hrs.)  
Wally DePauw  
(319) 377-1260  
Don Helmick

Have absorbent pads; test  
underground storage tanks

(Petrotite system). Specialty  
is installation, service and  
cleaning of bulk storage tanks.  
but can handle some small spills.  
Work mostly within a 60 mile  
radius of office.

East Dubuque, IA  
(608) 748-4426 (bus. hrs.)

Eldridge, IA.  
(319) 285-8141 (bus. hrs.)

Resource Industries, Inc.  
2018 E. Prairie Circle, Bldg. B  
Olathe, KS 66062  
(913) 541-7150

Containment and Absorbent booms  
and Pads for spills. Emulsifiers  
and Bioremediation Products

Response Industries, Inc.  
2018 East Prairie Circle  
Olathe, KS 66062  
(913) 541-7150

Roto Rooter  
5660 Inland Drive  
Kansas City, Kansas 66106  
(913) 287-5005

General Plumbing Response  
Services. Possibility for  
oil spills in K.C. area

Russell & Sons Const. Co., Inc.  
Box 535  
Eureka, KS 67045  
(316) 583-5512

Full line of heavy construction  
equipment

Union Oil  
St. Paul, MN  
(612) 227-9438  
Randy Veil

Boom, sorbents, pumps, boat  
and other equipment available.

VIII. CLEAN-UP & DISPOSAL CONTRACTORS

3. Equipment Available for Loan By Industry  
& Commercial Sources (continued)

| <u>COMPANY &amp; LOCATION</u>                                                                                     | <u>SERVICES &amp; EQUIPMENT</u>                |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Upper River Services<br>South St. Paul, MN<br>(612) 292-9293<br>Greg Genz                                         | Boom, sorbents, and boat.                      |
| Vel-Tex Chemical<br>St. Paul, MN<br>(612) 774-9604                                                                | Boom, sorbents, pump and hose..                |
| Vestway Trading<br>St. Paul, MN<br>(612) 774-6600<br>Gordon Meyer                                                 | Boom, sorbents, and pump.                      |
| Williams Pipeline Company<br>2503 SE 43rd Street<br>Des Moines, IA 50317<br>(612) 633-1555 (bus. hrs)<br>Gary Lee | Absorbents, pumps, hose, etc.                  |
| 912 1st Avenue<br>Coralville, IA 52241<br>(918) 588-3200 (24 hr - Tulsa)<br>John Martin                           |                                                |
| P. O. Box 245<br>Clear Lake, IA 50428<br>(515) 357-2124<br>Vally Anderson                                         |                                                |
| 7th & Yates<br>Omaha, NE 68110<br>(402) 342-5476<br>6 am - 10 pm<br>Bob Schmidt                                   | Loan of oil clear up equipment.<br>Omaha area. |

## VIII. CLEAN-UP & DISPOSAL CONTRACTORS

### 4. PCB Disposal Companies

#### ENSCO

333 Executive Court  
Little Rock, AR 72205 (Facility: Physical Separation)  
(501) 223-4100

National Electric/Aptus  
P. O. Box 1328  
Coffeyville, KS 67337 (Facility: Physical Separation)  
(316) 251-6380

National Oil Processing/Aptus  
P. O. Box 1328  
Coffeyville, KS 67337 (Facility: Chemical)  
(316) 251-6380

PFM, Incorporated  
1875 Forge Street  
Tucker, GA 30084 (Facility: Chemical) (404) 934-0902  
and  
10 Central Ave.  
Kansas City, KS 66118 (913) 621-4206

Pyrochem/Aptus  
P. O. Box 1328  
Coffeyville, KS 67337 (Facility: Incinerator)  
(316) 251-6380

Quadrex EPS, Incorporated  
1940 NW 67th Place  
Gainesville, FL 32606 (Facility: Physical Separation)  
(904) 373-6066

Sun Environmental, Incorporated  
1700 Gateway Blvd. S.E.  
Canton, OH 44707 (Facility: Chemical) (216) 452-0837

Transformer Consultants  
P. O. Box 4724  
Akron, OH 44310 (Facility: Chemical) (800) 321-9580

Trinity Chemical Company, Inc.  
6405 Metcalf, Cloverleaf 3, Suite 313  
Shawnee Mission, KS 66202 (Facility: Chemical)  
(913) 831-2290

### USEPA Regional PCB Disposal Contacts

Leo Alderman, PCB Coordinator

Gary Bertram  
Toxics and Pesticides Branch  
Environmental Protection Agency, Region VII  
726 Minnesota Avenue  
Kansas City, KS 66101 (913) 236-2835

## APPENDIX C.2

### EQUIPMENT

Appendix C.2 contains a listing of response equipment and resources available through contractors and responders.

Contractors listed in the Facility Response Plans received by Region VII are being contacted and asked to send an inventory of their response equipment. Information obtained will be incorporated into this Appendix as it is received.

## **EPA RESPONSE CAPABILITIES**

### **REGION VII ON-SCENE COORDINATORS**

| <u><b>NAMES</b></u>  | <u><b>TELEPHONE NUMBERS</b></u> |
|----------------------|---------------------------------|
| Carl Bailey          | (913) 551-5015                  |
| Jamie Bernard-Drakey | 551-5060                        |
| Roy Crossland        | 551-5025                        |
| Tim Curry            | 551-5017                        |
| Don Hamera           | 551-5028                        |
| Dan Harris           | 551-5024                        |
| George Hess          | 551-5021                        |
| Carol Kather         | 551-5037                        |
| Bill Keffer          | 551-5009                        |
| Jim Kudlinski        | 551-5152                        |
| Jim MacDonald        | 551-5103                        |
| Ron McCutcheon       | 551-5007                        |
| Wood Ramsey          | 551-5012                        |
|                      | 551-5011                        |
|                      | 551-5010                        |
| Mark Thomas          | 551-5055                        |
| Dave Williams        | 551-5030                        |

### **FAX NUMBER**

(913) 551-5035

### **EPA/EP&R VEHICLES**

- 6 - Vans &/or Minivans
- 4 - 4 x 4 Trucks &/or Suburbans
- 2 - 4 x 4 Suburbans
- 1 - Drill Rig
- 1 - Cube Van (Emergency Response Vehicle)

## TAT SUPPORT EQUIPMENT

- 5 - Binoculars
- 1 - Cameo Data Base
- 5 - Portable Cellular Phones
- 3 - Non-Portable Cellular Phones
- 6 - Cameras (35 mm)
- 1 - Cable Locator
- 8 - Flashlights
- 1 - Geoprobe
- 1 - Grounding and Bonding Kit
- 2 - Heavy duty winches
- 1 - OHMTAD Chemical Data Base
- 2 - Portable Pumps
- 1 - Vacuum (Industrial)
- 1 - Video Camera (Panasonic)
- 2 - Weather Station
- 1 - Boat

## SAMPLING EQUIPMENT

- 20+ - Coolers
- 8 oz. jars
- Pint bottles
- 64 oz. jugs
- Sorbent pads
- Booms
- Vacucontainers
- Thieving rods

## TAT TRANSPORTATION

### Kansas City Office:

- 1983 Chevy 4 x 4 Pick-up, EPA 1178
- 1987 Chevy Suburban, EPA 1056
- 1987 Plymouth voyager - Local Only, EPA 1052
- 1988 Chevy Astro Van, EPA 707
- 1989 3/4 Ton Dodge Pick-up - Geoprobe, EPA 709
- 1989 Dodge Caravan, EPA 1068
- 1991 Dodge Caravan, EPA 1270
- 1991 Dodge Caravan, EPA 1271



1991 Dodge Caravan, EPA 1272  
1992 Ambulance-type Response Vehicle, EPA 1378  
1993 Mobile Command Post, EPA 1418

St. Louis Office:

1980 Chevy Suburban  
1987 Chevy Celebrity Sedan  
1989 Chevy Astro Van

**FIELD MONITORING AND TESTING EQUIPMENT**

2 - Colormetric GIV Test Kits  
4 - Combination Combustible Gas/Oz Meter (MSA)  
3 - Conductivity Meter - pH - Temperature  
2 - Draeger Colormetric Tube Sets  
10 - Gilian Sampling Pumps  
4 - Hazcat Kits  
1 - heat Stress Monitor  
5 - HNu Photoionization Detectors  
5 - OVA - GC Organic Vapor Analyzer  
3 - Radiation Monitor (Rad-mini)  
4 - Hand-held 2-way Radios  
1 - Radiation Meter - Ludlum  
1 - Mercury Vapor Analyzer - Jerome 411  
1 - Spectrophotometer - DR 3000  
1 - Test Kit - for Immunoassay screening, chlor-n-oil (PCB screening),  
chlor-n-soil (PCB screening), and setaflash

**PERSONAL PROTECTIVE EQUIPMENT**

5 - Canister Respirators  
3 - Cooling Vests  
1 - Eyewash Station  
4 - First Aid Kits  
6 - Escape Packs (ELSA)  
8 - Powered Air Purifying Respirators  
10 - Self Contained Breathing Apparatus (SCBA), 30 Minute  
16 - SCBA Cylinders (extra), 30 Minute

**LEVEL B-C PROTECTIVE CLOTHING IN REGULAR INVENTORY**

4 - Responder (encapsulating B)  
Saranex  
Sygel  
Tyvek

Latex Booties  
Gloves - Viton  
Butyl  
Vinyl  
Latex  
Nitrile  
Surgical  
Duct Tape

Each TAT assigned to the field is issued: APR, hard hat, safety goggles, chemical boots, leather boots, nomex hood, nomex hood, nomex jump suit and cotton jump suits.

Enclosure (4) to Annex 00 to Region VII Regional Contingency Plan

**SECOND COAST GUARD DISTRICT RESPONSE RESOURCES  
MARINE SAFETY OFFICE CONTACT LIST**

---

**St. Louis:**

|                    |                      |                    |
|--------------------|----------------------|--------------------|
| Commanding Officer | CDR Scott Cooper     | COM (314) 539-3091 |
| Executive Officer  | LCDR Alan Peak       | FAX (314) 539-2659 |
| MSD Davenport      | LCDR Mike Shafersman | COM (319) 322-6297 |
| MSD Minn/St. Paul  | LT Terrence Carter   | COM (612) 290-3991 |
|                    |                      | FAX (612) 290-3992 |

---

**Memphis:**

|                    |                   |                      |
|--------------------|-------------------|----------------------|
| Commanding Officer | CDR Michael Slack | COM (901) 544-3941   |
| Executive Officer  | CDR Patrick Keane | FAX (901) 544-3886   |
| MSD Greenville     | LT James Hillarns | COM (601) 332-0964/5 |

---

**Paducah:**

|                    |                    |                    |
|--------------------|--------------------|--------------------|
| Commanding Officer | CDR Robert Segovis | COM (502) 442-1621 |
| Executive Officer  | LCDR Craig Bone    | COM (502) 443-7061 |
| MSD Nashville      | LCDR David Conklin | COM (615) 736-5421 |
|                    |                    | FAX (615) 736-7315 |

---

**Louisville:**

|                    |                       |                    |
|--------------------|-----------------------|--------------------|
| Commanding Officer | CDR William Morani    | COM (502) 582-5194 |
| Executive Officer  | LCDR Adan D. Guerrero | FAX (502) 582-6825 |
| MSD Cincinnati     | LT Ronald Hassler     | COM (513) 684-3295 |
|                    |                       | FAX (513) 684-3279 |

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**Huntington:**

|                    |                       |                    |
|--------------------|-----------------------|--------------------|
| Commanding Officer | CAPT Joseph T. Kuchin | COM (304) 529-5524 |
| Executive Officer  | LCDR Stephen Garrity  | FAX (304) 522-9457 |

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**Pittsburgh:**

|                    |                      |                    |
|--------------------|----------------------|--------------------|
| Commanding Officer | CDR Michael W. Brown | COM (412) 644-5808 |
| Executive Officer  | LCDR David Eley      | FAX (412) 644-3479 |

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Enclosure (5) to Annex 00 to Region VII Regional Contingency Plan

**SECOND COAST GUARD DISTRICT RESPONSE RESOURCES  
PREPOSITIONED EQUIPMENT**

National Site. The following oil spill response equipment is stored at the U.S. Army Melvin Price Support Center in Granite City, IL, and is available through the District Response Advisory Team. Technical specifications are available from the DRAT.

**Vessel of Opportunity Skimming System (VOSS)**

- Manufactured by Hyde Products, Cleveland OH
- Consists of two equipment sets, one for each side of the ship, each pumps 190 gpm powered by a 88 hp diesel hydraulic prime mover.
- Each set is shipped in a 14'x8' container weighing 11,000 lbs loaded.

**Portable Inflatable Collapsible Barges (2)**

- Manufactured by Lancer Industries, Auckland NZ
- Holds 26,000 gallons when full
- Inflated size: 51' long x 18' wide x 8' deep
- helicopter-transportable (sling load)

**Foam Filled Oil Containment Boom (5000 feet)**

- Manufactured by American Marine Inc., Cocoa Beach FL
- Shipped in 10 watertight containers (500' each)
- 50 foot sections, 42" high with 15.5" freeboard

**Low-Bed Trailers (4)**

- Manufactured by MCT Industries, Albuquerque NM
- One 48' trailer for VOSS, prime movers and barges
- Three 42' trailers for boom

**C-130 Aircraft Pallets**

- One VOSS and two barges can be transported on one C-130

MSO Prepositioned Response Equipment. In 1991, each Marine Safety Office and Detachment was provided with 18 inch oil spill boom and trailers, to be prepositioned within their zones. A total of 34 trailers were purchased, each with 1000 feet of boom (10 100' sections) and anchors, ropes, tools and other equipment required for effective deployment. The trailers are accessed through the responsible MSO at the number shown. The trailers are currently positioned as follows:

**MSO HUNTINGTON WV (304/486-5605)**

- ♦ Belleville Locks and Dam, Belleville WV
  - mile 203.9 RDB Ohio River
- ♦ Marmet Locks and Dam, Marmet WV
  - mile 67.7 RDB Kanawha River
- ♦ MSO Huntington, 937 Washington St, Huntington WV
  - mile 308 LDB Ohio River

MSO LOUISVILLE KY (502/582-5194)

- ♦ Capt. Anthony Meldahl Locks and Dam, Neville OH
  - mile 436.2 RDB Ohio River
- ♦ MSD Cincinnati OH, 4335 River Rd. Cincinnati OH
  - mile 477.5 RDB Ohio River
- ♦ Markland Locks and Dam, Markland IN
  - mile 531.5 LDB Ohio River
- ♦ McAlpine Locks and Dam, Louisville KY
  - mile 606.8 LDB Ohio River
- ♦ Cannalton Locks and Dam, Cannalton IN
  - mile 720.7 RDB Ohio River
- ♦ Newburgh Locks and Dam, Evansville IN
  - mile 776.1 RDB Ohio River

MSO MEMPHIS TN (901/544-3941)

- ♦ Newt Graham Locks and Dam, Tulsa OK
  - mile 421.6 LDB Arkansas River
- ♦ MSD Greenville, 1801 Industrial Park Rd, Greenville MS
  - mile 540 LDB Lower Mississippi River
- ♦ MSO Memphis, 200 Jefferson Ave, Memphis TN
  - mile 725.5 LDB Lower Mississippi River (Memphis Harbor)
- ♦ Murray Locks and Dam, Little Rock AR
  - mile 125.4 RDB Arkansas River
- ♦ Norraill Locks and Dam, Tishner AR
  - mile 10.3 LDB White River
- ♦ Trimble Locks and Dam, Fort Smith AR
  - mile 292.8 RDB Arkansas River

MSO PITTSBURGH PA (412/281-3311)

- ♦ USCGC Osage Moorings, Sewickley PA
  - mile 10.9 RDB Ohio River
- ♦ Pike Island Locks and Dam, Wheeling WV
  - mile 84.2 LDB Ohio River
- ♦ Lock and Dam 3, Harmarville PA
  - mile 14.5 LDB Allegheny River
- ♦ Lock and Dam 4, Monessen PA
  - mile 41.5 RDB Monongahela River

MSO ST LOUIS MO (314/539-3823)

- ♦ Lock and Dam 4, Alma WI
  - mile 752.8 LDB Upper Mississippi River
- ♦ Lock and Dam 8, Genoa WI
  - mile 679.2 LDB Upper Mississippi River
- ♦ Rock Island Arsenal, Rock Island IL (2 trailers)
  - mile 483.0 LDB Upper Mississippi River
- ♦ Granite City Army Depot, Granite City IL (3 trailers)
  - mile 185.0 LDB Upper Mississippi River
- ♦ Chester Public Works, Chester IL
  - mile 109.8 LDB Upper Mississippi River
- ♦ USEPA Region VII Laboratory, Kansas City KS
  - mile 368.0 RDB Missouri River

MSO PADUCAH KY (502/442-1621)

- ♦ MSO Paducan. 225 Tully St, Paducah KY (2 trailers)
  - mile 934.0 LDB Ohio River
- ♦ Smithland Locks and Dam, Smithland KY
  - mile 918.5 RDB Ohio River
- ♦ Old Hickory Locks and Dam, Rayon City TN
  - mile 216.2 LDB Cumberland River
- ♦ Pickwick Landing Locks and Dam, Counce TN
  - mile 206.5 LDB Tennessee River
- ♦ TVA Gunthersville Res. Maintenance Base, Gunthersville AL
  - mile 358.0 RDB Tennessee River

Enclosure (6) to Annex 00 to Region VII Regional Contingency Plan

**SECOND COAST GUARD DISTRICT RESPONSE RESOURCES  
ON-SITE COMMUNICATIONS**

The Second Coast Guard District maintains the following transportable communications capabilities which can be deployed to support OSCs on request. The system was developed to allow an OSC to communicate with his or her home office from any point in the Second District. All equipment travels with the operator as excess baggage and can be transported to the site in a rental vehicle and powered with a car battery or portable generator.

**CELLULAR COMPONENT**, consisting of 2 Motorola 260 cellular telephones with "Cellular Connection" interfaces, and two Fujitsu "dexExpress" portable facsimile machines. Both operate from 100VAC or 12VDC from a vehicle cigar lighter.

**SATELLITE COMPONENT**, consisting of a Mobile Telesystems Inc. TCS-9200 INMARSAT-A terminal. This terminal connects with the national telephone system through COMSAT in Southbury CT and provides high-quality voice and data (facsimile) through the INMARSAT satellite constellation. It consists of a single 110 lb case.

**HF-SSB COMPONENT**, consisting of two portable high frequency radios which provide access to FEMA, DOT and EPA radio networks on 2-30 MHz at 125 watts. The component has not yet been equipped with ALE and requires a trained operator. One set has a battery pack and both are powered by either 110VAC or 12VDC.

**VHF-FM COMPONENT**, consisting of six 6 watt Motorola Saber I handheld radios and two portable 40 watt base stations, operating on Coast Guard frequencies in the 150-174 MHz band. The base stations are powered by either 110VAC or 12VDC.

**COMPUTER COMPONENT**, consisting of either a Macintosh SE/30 computer or a Zenith 640KB laptop computer. Both have compatible dot-matrix printers and power supplies for 110VAC or 12VDC and are loaded with a word processor and spreadsheet. The SE/30 has Microsoft Word and Excel, which is compatible with current NPFC and NSF capabilities.

**- POWER SUPPLY/SUPPORT COMPONENT**, consisting of a variety of cords, power supplies, instruments, tools and adapters to allow effective operation and maintenance of the other components.

Enclosure (7) to Annex 00 to Region VII Regional Contingency Plan

SECOND COAST GUARD DISTRICT RESPONSE RESOURCES  
OTHER RESOURCES

Cutters. The Second Coast Guard District has eighteen buoy tenders assigned which can support response operations on request. Their locations depend on their operational and maintenance schedules. They can be accessed through the MSO for that area.

Small Boats. The Second District has a variety of small boats assigned, generally between 17'-21' in length with twin outboard motors. The actual number available varies with operational and maintenance schedules. A number of 17 foot flood relief boats are also available. These boats have single outboard motors and are minimally equipped. All boats are accessed through the cognizant MSO.

Safety and Occupational Health Specialist. The Second District has assigned an Industrial Hygienist who can support development and enforcement of site safety plans on request.

Contracting Support. The DRAT has assigned a contracting officer who can assist an OSC with emergency contracting needs.

Basic Ordering Agreements. The Second District has entered into Basic Ordering Agreements (BOAs) with a number of cleanup contractors to provide standard services at standard rates in support of OSC operations. All can be retained directly or through the Second District Marine Safety Division.

|                                     |                   |
|-------------------------------------|-------------------|
| Riedel Environmental Services, Inc. | DTCG84-91-A-20003 |
| 18207 Edison Avenue                 | 314/532-7660      |
| Chesterfield, MO 63005              |                   |

|                    |                   |
|--------------------|-------------------|
| Petroclean, Inc.   | DTCG84-91-A-20001 |
| P.O. Box 92        | 412/279-9556      |
| Carnegie, PA 15106 |                   |

|                                 |                   |
|---------------------------------|-------------------|
| Environmental Specialists, Inc. | DTCG84-91-A-20004 |
| 3001 East 83rd Street           | 816/523-5081      |
| Kansas City, MO 64132           |                   |

|                                |                   |
|--------------------------------|-------------------|
| OHM Remediation Services Corp. | DTCG84-91-A-20002 |
| 16406 U.S. Route 224 East      | 419/423-3526      |
| Findlay, OH 45840              |                   |

|                            |                   |
|----------------------------|-------------------|
| Belpar Environmental, Inc. | DTCG84-90-R-30001 |
| 510 "C" Street             |                   |
| P.O. Box 8278              |                   |
| South Charleston, WV 25303 |                   |



## **FIRE FIGHTING EQUIPMENT**

**Fire fighting equipment** is available through the local fire departments referenced in Appendix C.1; however, additional equipment is available through the National Fire Equipment System (NFES). The *Fire Supplies and Equipment Catalog, April 1993*, is available through EPA Region VII, Emergency Planning and Response (EP&R), 25 Funston Rd., Kansas City, Kansas, 66115, (913) 551-5000. The catalog lists fire supplies and equipment stocked by the NFES caches. Emergency orders for incidents should be directed through:

**ORDERS MONDAY--  
FRIDAY, 7:45-4:15  
CENTRAL TIME**

**General Services Administration (GSA)  
General Products Commodity Center  
Fort Worth, Texas  
(817) 334-2605**

**ORDERS MONDAY--  
FRIDAY BETWEEN 2:15  
AND 3:15 PACIFIC TIME**

**GSA Region 9 Wester Distribution  
Center, Stockton, California  
(209) 946-6382/6383/6384  
FAX (209) 946-6076**

**ALL OTHER AFTER HOURS,  
WEEKEND AND HOLIDAY CALLS**

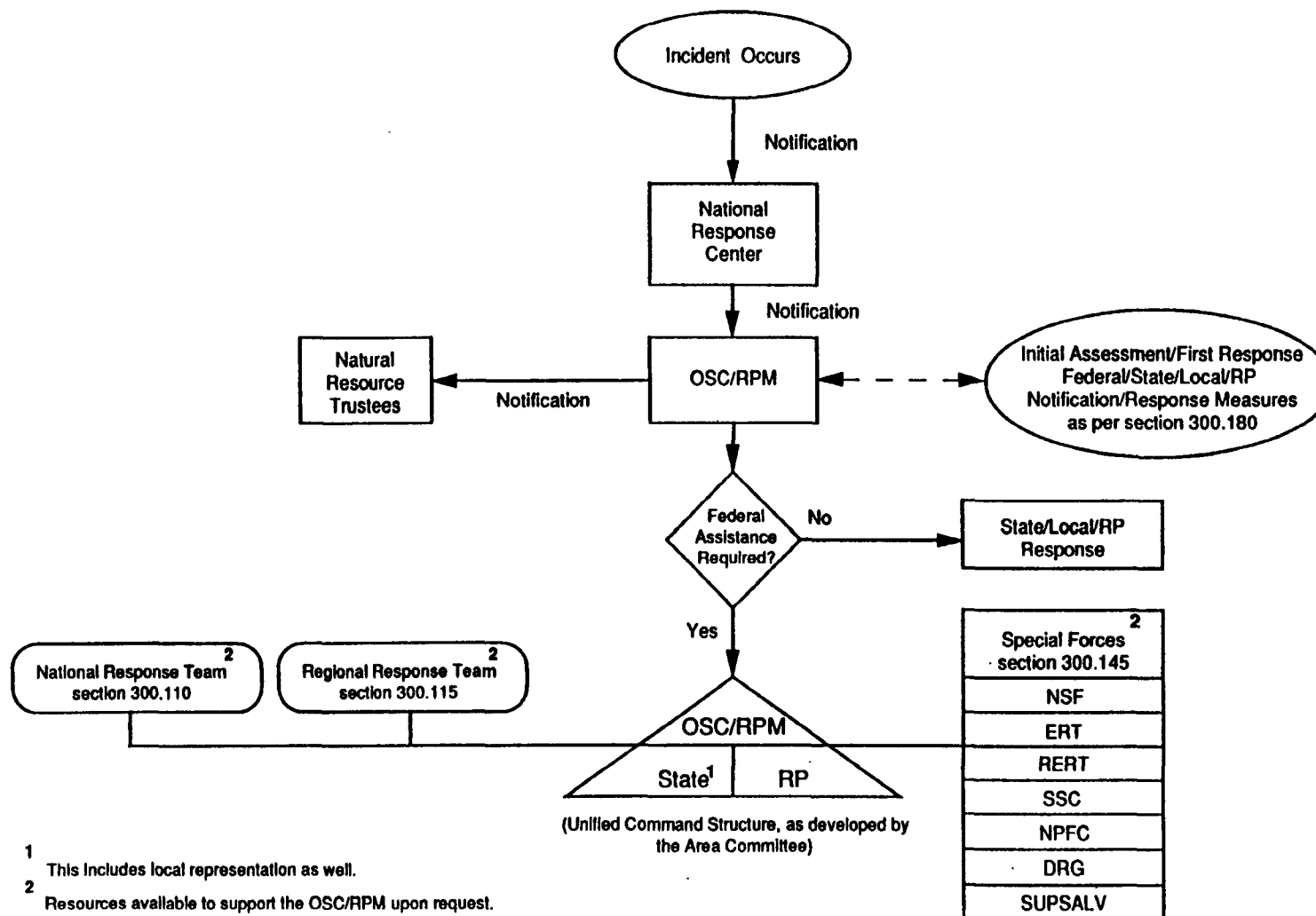
**(209) 466-9512 (answering  
service)**

## APPENDIX C.3

### USCG/EPA RESPONSE BOUNDARIES

Figure 1a

# National Response System Concepts: Response



# Figure 1b National Response System Concepts: Planning

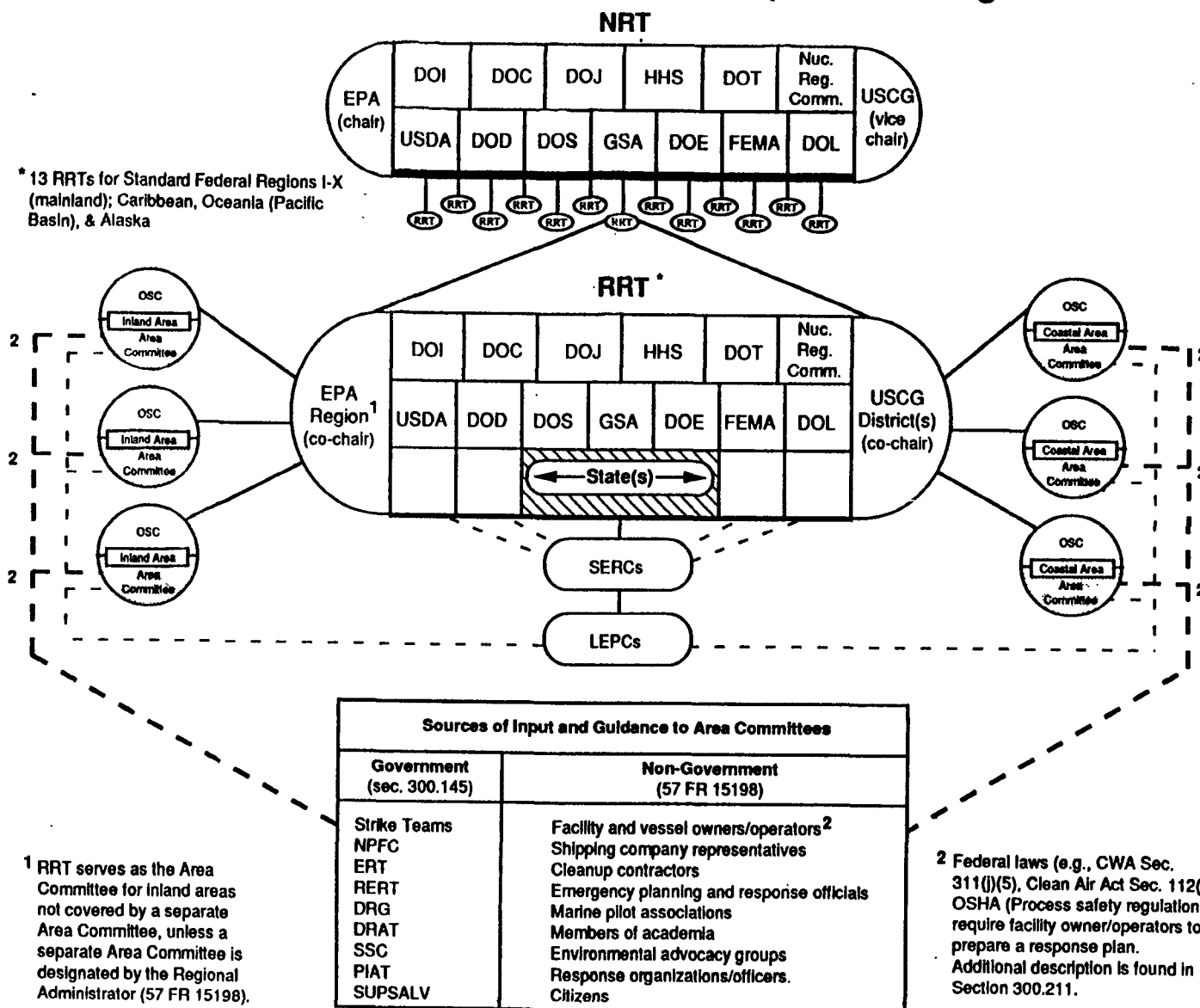
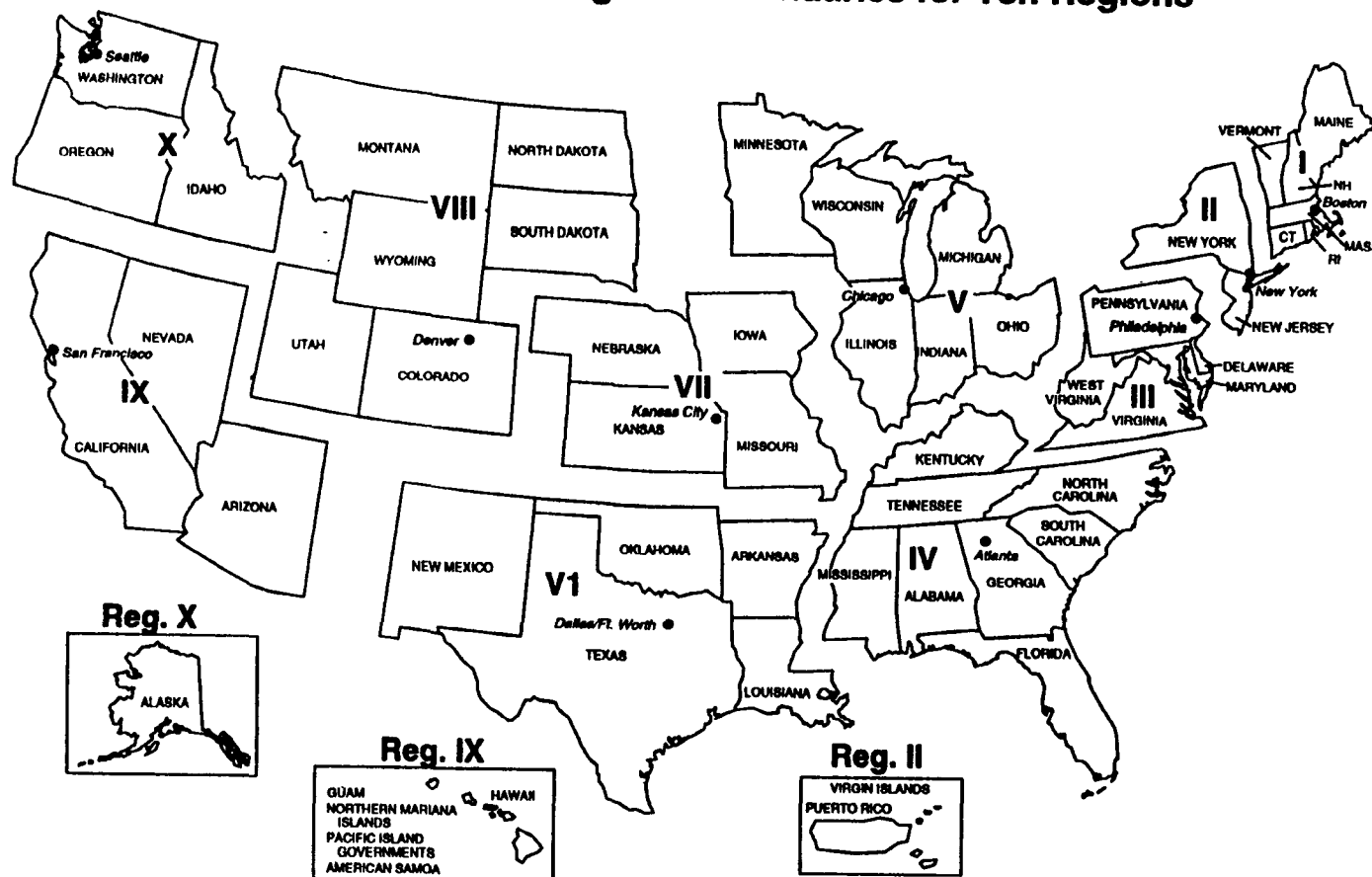


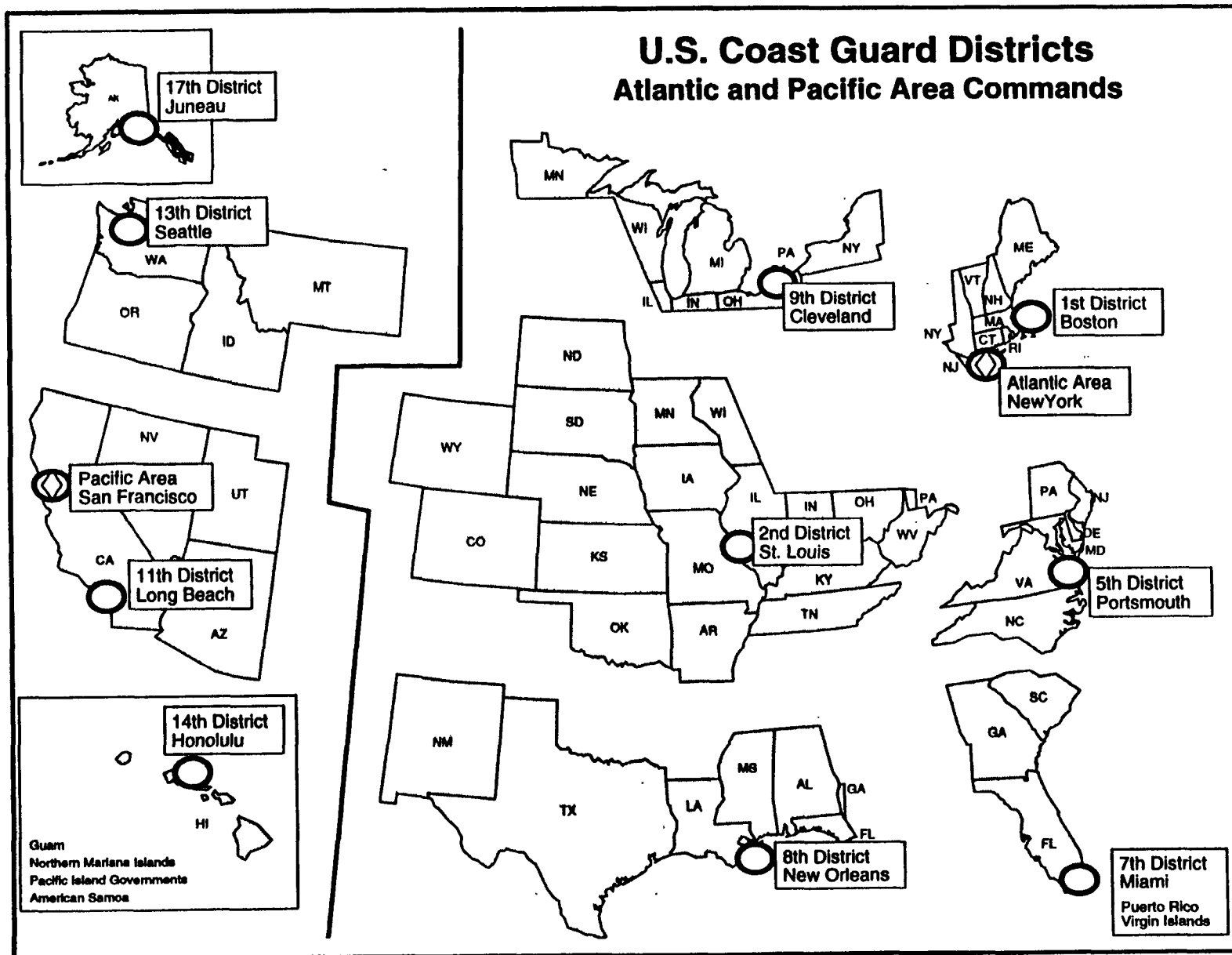
Figure 2

Figure 2 -- Standard Regional Boundaries for Ten Regions



BILLING CODE 6550-40-C  
(3) The USCG District boundaries are shown in the following Figure 3:  
BILLING CODE 6550-60-P

Figure 3





## APPENDIX D

1. REGION VII LEPCs
2. REGION VII SERCs
3. REGION VII RRT MEMBER LIST
4. AREA COMMITTEE MEMBERS
5. EMERGENCY CONTACTS LIST



## APPENDIX D.1

### REGION VII LEPCs

STATE OF IOWA

LEPC CHAIRPERSONS

June 1993

|                |              |                                                                                                             |
|----------------|--------------|-------------------------------------------------------------------------------------------------------------|
| Adair County   | 515/743-6111 | Marvin Ford, LEPC Chair<br>Board of Supervisors<br>County Courthouse<br>Greenfield, Iowa 50849              |
| Adams County   | 515/322-4444 | Jon McAlpin, LEPC Chair<br>Emergency Management Agency<br>R.R. #4<br>Corning, Iowa 50841                    |
| Allamakee Co.  | 319/568-4521 | Neil E. Becker, LEPC Chair<br>Sheriff's Office<br>County Courthouse<br>Waukon, Iowa 51272                   |
| Appanoose Co.  | 515/856-2314 | L. Jay Johnson, LEPC Chair<br>Emergency Management Agency<br>510 W. Maple Street<br>Centerville, Iowa 52544 |
| Audubon County | 712/563-2611 | Roger Hansen, LEPC Chair<br>Audubon County Hospital<br>515 Pacific Street<br>Audubon, Iowa 50025            |
| Benton County  | 319/472-2337 | Ken Popenhagen, LEPC Chair<br>Sheriff<br>R.R.#1<br>Atkins, Iowa 52206                                       |
| Black Hawk Co. | 319/291-4459 | Stanley Stapella, Chair<br>Waterloo Fire Department<br>426 E. Third<br>Waterloo, Iowa 50703                 |
| Black Hawk Co. | 319/291-4373 | Gary Blair, Secretary<br>Emergency Management Agency<br>City Hall, 715 Mulberry<br>Waterloo, Iowa 50704     |
| Bremer County  | 319/352-5040 | Evelyn Koepke, LEPC Chair<br>County Board of Supervisors<br>County Courthouse<br>Waverly, Iowa 50677        |
| Buchanan Co.   | 319/334-3578 | Leo Donnelly, LEPC Chair<br>Board of Supervisors<br>County Courthouse<br>Independence, Iowa 50644           |

STATE OF IOWA

|                 |              |                                                                                                                    |
|-----------------|--------------|--------------------------------------------------------------------------------------------------------------------|
| Buena Vista Co. | 712/732-5102 | Ron Wilson, LEPC Chair<br>Storm Lake Fire Departement<br>820 Oneida<br>Storm Lake, Iowa 50588                      |
| Butler County   | 319/257-2410 | Timothy Junker, LEPC Chair<br>Sheriff's Office<br>428-6th St.<br>Allison, Iowa 50602                               |
| Calhoun County  | 712/297-7583 | William Davis, LEPC Chair<br>Sheriff's Office<br>304 Court St.<br>Rockwell City, Iowa 50579                        |
| Carroll County  | 712/792-2458 | Donald Dreesen, LEPC Chair<br>916 W. 21st St.<br>Carroll, Iowa 51401                                               |
| Cass County     | 712/243-4570 | Chuck Rieken, LEPC Chair<br>Board of Supervisors<br>County Courthouse.<br>7th and Chestnut<br>Atlantic, Iowa 50022 |
| Cedar County    | 319/886-2121 | Jill Randolph, LEPC Chair<br>Sheriff's Office<br>County Courthouse<br>Tipton, Iowa 52772                           |
| Cerro Gordo Co. | 515/421-3640 | Ron Van Horn, LEPC Chair<br>Fire Departement<br>250 - 5th St.<br>Mason City, Iowa 50401                            |
| Cherokee Co.    | 712/225-3102 | Board of Supervisors<br>County Courthouse<br>Cherokee, Iowa 51012                                                  |
| Chickasaw Co.   | 515/394-2406 | Ken Rasing, LEPC Chair<br>Emergency Management Agent<br>Box 214<br>New Hampton, Iowa 50659                         |
| Clarke County   | 515/445-5539 | Steve Smith, LEPC Chair<br>Board of Supervisors<br>Clarke County Courthouse<br>Osceola, Iowa 50213                 |

STATE OF IOWA

|                  |              |                                                                                                        |
|------------------|--------------|--------------------------------------------------------------------------------------------------------|
| Clay County      | 712/262-3522 | Gary Stover, LEPC Chair<br>518 - 9th Avenue W<br>Spencer, Iowa 51301                                   |
| ✓ Clayton Co.    | 319/252-2176 | Owen Pufahl, LEPC Chair<br>Emergency Management Agency<br>322 1st Street<br>Guttenberg, Iowa 52052     |
| ✓ Clinton County | 319/243-6210 | Ross Spooner, LEPC Chair<br>Board of Supervisors<br>County Courthouse<br>Clinton, Iowa 52732           |
| Crawford Co.     | 712/675-4558 | LeRoy A. Hansohn, Chair<br>Board of Supervisors<br>County Courthouse<br>Denison, Iowa 51442            |
| Dallas County    | 515/993-4567 | Jerry Harmon, LEPC Chair<br>Sheriff's Office<br>201 N. 8th.<br>Box 229<br>Adel, Iowa 50003             |
| Davis County     | 515/664-2054 | Craig Scott, LEPC Chair<br>Emergency Management Agency<br>P.O. Box 184<br>Bloomfield, Iowa 52537       |
| Decatur County   | 515-446-4382 | William Ballantyne, LEPC Ch<br>Board of Supervisors<br>County Courthouse<br>Leon, Iowa 50144           |
| Delaware Co.     | 319/927-3410 | Bob Clemen, LEPC Chair<br>Board of Supervisors<br>County Courthouse<br>Manchester, Iowa 52057          |
| ✓ Des Moines Co. | 319/753-8206 | Pat Wondra, LEPC Chair<br>Emergency Management<br>512 N. Main Street<br>Burlington, Iowa 52601         |
| Dickinson Co.    | 712/336-1675 | Lynn Wallace, LEPC Chair<br>Emergency Management Agency<br>RR #9 - Box 9182<br>Spirit Lake, Iowa 51360 |

STATE OF IOWA

|                  |                              |                                                                                                               |
|------------------|------------------------------|---------------------------------------------------------------------------------------------------------------|
| ✓ Dubuque County | 319/589-4170                 | Robert Gooch, LEPC Chair<br>Central Fire Headquarters<br>9th and Central<br>Dubuque, Iowa 52001               |
| Emmet County     | 712/362/4812                 | Roger Anderson, LEPC Chair<br>Board of Supervisors<br>221 W. N. 4th Street<br>Estherville, Iowa 51334         |
| Fayette County   | 800/828-1124                 | Jake Blitsch, LEPC Chair<br>U.S. West<br>442 S. Frederick<br>Oelwein, Iowa 50662                              |
| Floyd County     | 515/228-7111                 | Neil Griffin, LEPC Chair<br>Floyd County Courthouse<br>Charles City, Iowa 50616                               |
| Franklin Co.     | 515/456-4254                 | Donald Friest, Contact<br>Courthouse<br>Box 335<br>Hampton, Iowa 50441                                        |
| Fremont County   | 712/374-2415                 | Keith Hickey, LEPC Chair<br>Board of Supervisors<br>County Courthouse<br>Sidney, Iowa 51652                   |
| Greene County    | 515/386-2136                 | Dennis Morlan, LEPC Chair<br>204 N. Grinnell Rd<br>Box 416<br>Jefferson, Iowa 50129                           |
| Grundy County    | 319/824-6933<br>319/345-2193 | D. Sheridan Roberts, LEPC Chair<br>705 - 8th Street<br>Grundy Center, Iowa 50631                              |
| Guthrie County   | 515/747-8320                 | Jerry Caraher, LEPC Chair<br>Board of Supervisors<br>200 N. 5th St., Courthouse<br>Guthrie Center, Iowa 50111 |
| Hamilton County  | 515/832-3525                 | Miles Butler, LEPC Chair<br>Board of Supervisors<br>Courthouse<br>Webster City, Iowa 50595                    |
| ✓ Hancock County | 515/923-2702                 | Cliff Smith, LEPC Chair<br>Emergency Management Agency<br>875 State Street<br>Garner, Iowa 50438              |

STATE OF IOWA

|                        |                                      |                                                                                                            |
|------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------------|
| Hardin County          | 515-638-3822                         | Lyle Jaske, LEPC Chair<br>T&C Mobile Home Pk, #22<br>Eldora, Iowa 50627                                    |
| Harrison County        | 712/644-2839                         | Zane McBride, LEPC Chair<br>323 North 4th Ave.<br>Logan, Iowa 51546                                        |
| Henry County           | 319/385-1479                         | Ed Farley, LEPC Chair<br>Emergency Management<br>220 W. Monroe<br>Mt. Pleasant, Iowa 52641                 |
| Howard County          | 319/547-2636                         | James Kovarik, LEPC Chair<br>Emergency Management Agency<br>County Courthouse<br>Cresco, Iowa 52136        |
| Humboldt County        | 515/332-1453                         | Jean Kieve, LEPC Chair<br>City of Humboldt<br>City Hall<br>Humboldt, Iowa 50548                            |
| <del>Iowa</del> County | 712/365-4676                         | Richard J. Madsen, LEPC Cha<br>Emergency Management Agency<br>301 Walnut<br>Battle Creek, Iowa 51006       |
| Iowa County            | 319/642-3151                         | Alan Husband, LEPC Chair<br>Emergency Management Agency<br>132 W. Marion<br>Marengo, Iowa 51301            |
| Jackson County         | 319-556-7730 wk.<br>319-872-4703 hm. | Michael Connelly, LEPC Cha<br>910 N. Riverview<br>Bellevue, Iowa 52031                                     |
| Jasper County          | 515/792-7555                         | Marlys DeVries, LEPC Chair<br>Jasper Emerg. Mngt. Agency<br>County Courthous. Rm 108<br>Newton, Iowa 50208 |
| Jefferson County       | 515/472-2951                         | J.R. Simmons, LEPC Chair<br>Board of Supervisors<br>County Courthouse<br>Fairfield, Iowa 52556             |
| Johnson County         | 319/356-6028                         | Jim McGinlay, LEPC Secreta<br>Emergency Management Agenc<br>P.O. Box 169<br>Iowa City, Iowa 52244          |

STATE OF IOWA

|                 |              |                                                                                                            |
|-----------------|--------------|------------------------------------------------------------------------------------------------------------|
| Johnson County  | 319-337-6319 | Kerry Fitzpatrick LEPC Chair<br>2200 Lower Muscatine Rd<br>Iowa City, Iowa 52240                           |
| Jones County    | 319/462-3353 | John Christophersen, LEPC Chair<br>Jones County<br>Box 53<br>Clarence, Iowa 52216                          |
| Jones County    | 319/462-2735 | Dianna DeSotel, LEPC Secretary<br>Jones Co. Emergency Mgmt.<br>Courthouse<br>Anamosa, Iowa 52205           |
| Keokuk County   | 515/622-2902 | Bill Kuntz, LEPC Chair<br>Board of Supervisors<br>Keokuk County Courthouse<br>Sigourney, Iowa 52591        |
| Kossuth County  | 515/295-7120 | James Kelly, LEPC Chair<br>Emergency Management Agency<br>Courthouse, 114 West State<br>Algona, Iowa 50511 |
| ✓ Lee County    | 319/372-4124 | Robert Clark, LEPC Chair<br>8th St. & Avenue E<br>City Hall<br>Fort Madison, IA 52627                      |
| Linn County     | 319/398-5200 | Vern Bagley, LEPC Chair<br>C.R. Fire Dept.<br>222 3rd St. NW<br>Cedar Rapids, IA 52405                     |
| ✓ Louisa County | 319/523-8174 | Marvin Thomas, LEPC Chair<br>Emergency Management Agency<br>Box 141<br>Letts, IA 52754                     |
| Lucas County    | 515/774-2018 | Richard Arnold, LEPC Chair<br>Board of Supervisors<br>Courthouse<br>Chariton, IA 50049                     |
| Lyon County     | 712/753-4778 | Herb Hage, LEPC Chair<br>Emergency Management Agency<br>906 S. Story<br>Rock Rapids, Iowa 51273            |

STATE OF IOWA

|                 |              |                                                                                                             |
|-----------------|--------------|-------------------------------------------------------------------------------------------------------------|
| Madison County  | 515/462-2255 | Marvin Schultz, LEPC Chair<br>Emergency Management Agency<br>1006 N John Wayne Dr.<br>Winterset, Iowa 50273 |
| Mahaska County  | 515/673-3469 | Joe Warrick, LEPC Chair<br>Board of Supervisors<br>Courthouse<br>Oskaloosa, IA 52577                        |
| Marion County   | 515/828-2220 | Marvin Van Haaften, Chair<br>Marion County Courthouse<br>Knoxville, Iowa 50138                              |
| Marshall County | 515/754-6385 | Deanna Neldeberg, LEPC Chair<br>City Hall<br>24 N. Center St.<br>Marshalltown, IA 50158                     |
| Mills County    | 712/527-3846 | Vern Knudtson, LEPC Chair<br>RR #3<br>Box 263<br>Glenwood, IA 51534                                         |
| Mitchell County | 515-732-5861 | Don Hendrickson, LEPC Chair<br>Board of Supervisors<br>Courthouse<br>Osage, Iowa 50461                      |
| Monona County   | 712/423-1294 | Claire Joines, LEPC Chair<br>Emergency Management Agency<br>909 7th Street<br>Onawa, Ia 51040               |
| Monroe County   | 515/946-3421 | Billy K. Myers, LEPC Chair<br>Board of Supervisors<br>Monroe County Courthouse<br>Albia, Iowa 52531         |
| Montgomery Co.  | 712/623-5167 | Rick Askey, LEPC Chair<br>Red Oak Fire Dept.<br>1800 Broadway<br>Red Oak, Iowa 51566                        |
| ✓ Muscatine Co. | 319/263-6504 | Norman Smith, LEPC Chair<br>Biotek Associates<br>1110 Robin Road<br>Muscatine, IA 52761                     |
| O'Brien County  | 712/757-4305 | Anne Koontz, LEPC Chair<br>Communications Ctr.<br>Primghar, Ia 51245                                        |



STATE OF IOWA

|                  |              |                                                                                                            |
|------------------|--------------|------------------------------------------------------------------------------------------------------------|
| Osceola County   | 712/758-3621 | Dennis Hout, LEPC Chair<br>Ocheyedan Coop Elevator Assn<br>1249 - 9th Street<br>Ocheyedan, Iowa 51354      |
| Page County      | 712/246-4254 | Raymond Bryant, LEPC Chair<br>Emergency Management<br>Box 559/815 W. Thomas<br>Shenandoah, Iowa 50536      |
| Palo Alto County | 712/424-3436 | Henry Bonsetter, LEPC Chair<br>City of Cylinder<br>Cylinder, Iowa 50528                                    |
| Plymouth County  | 712/546-7018 | Wayne Schipper, LEPC Chair<br>City of Le Mars<br>P.O. Box 1130<br>Le Mars, Iowa 51031                      |
| Pocahontas Co.   | 712/335-4744 | Lowell Pedersen, LEPC Chair<br>24 - 3rd Avenue NW<br>Pocahontas, Iowa 50574                                |
| Polk County      | 315/286-2107 | Robert Plath, LEPC Chair<br>Polk Co. Office Bldg.<br>1st and Court. Rm 210<br>Des Moines, Iowa 50309       |
| Pottawattamie    | 319/547-2636 | Sgt. Jeff Danker, LEPC Chair<br>Sheriff's Dept.<br>227 S. 6th<br>Council Bluffs, Iowa 51501                |
| Poweshiek County | 315/625-5723 | Danny Carroll, LEPC Chair<br>Poweshiek County LEPC<br>County Courthouse<br>Montezuma, Iowa 50171           |
| Ringgold County  | 315/464-3951 | Lyle Minnick, LEPC Chair<br>Sheriff's Department<br>County Courthouse<br>Mount Ayr, Iowa 50854             |
| Sac County       | 712/662-7127 | Duane Rohde, LEPC Chair<br>Sheriff's Department<br>County Courthouse<br>Sac City, Iowa 50854               |
| Scott County     | 319/326-8663 | Bud Whitfield, Coordinator<br>ATTN: Dave Mallott, LEPC Chair<br>416 W. 4th Street<br>Davenport, Iowa 52801 |

STATE OF IOWA

|                |              |                                                                                                         |
|----------------|--------------|---------------------------------------------------------------------------------------------------------|
| Shelby County  | 712/755-5160 | Robert Seivert, Secretary<br>Shelby County LEPC<br>612 Court Street<br>Harian, Iowa 51537               |
| Sioux County   | 515/756-8997 | Del Walinga, LEPC Chair<br>Sioux County LEPC<br>410 11th Street<br>Alton, Iowa 51003                    |
| Story County   | 515/382-6581 | Don Ellis, LEPC Chair<br>Emergency Management Agency<br>County Courthouse<br>Nevada, Iowa 50201         |
| Tama County    | 515/484-3760 | Patricia Paustian, LEPC Chair<br>P.O. Box 34<br>Toledo, Iowa 52342                                      |
| Taylor County  | 712/523-2846 | Michael Ware, LEPC Chair<br>RADA Services<br>1104 Dodge<br>Bedford, Iowa 50833                          |
| Union County   | 515/782-7918 | JoAnn Bradley, LEPC Chair<br>Board of Supervisors<br>County Courthouse<br>Creston, Iowa 50801           |
| Van Buren Co.  | 319/293-3663 | Donald Pool, LEPC Chair<br>Van Buren County LEPC<br>County Courthouse<br>Keosauqua, Iowa 52565          |
| Wapello County | 515/683-0015 | Dean Giltner, Co-LEPC Chair<br>Board of Supervisors<br>Wapello County Courthouse<br>Ottumwa, Iowa 52501 |
| Warren County  | 515/961-6386 | Eldon Heavilin, LEPC Chair<br>Emergency Management Agency<br>1015 Angela Drive<br>Indianola, Iowa 50125 |
| Washington Co. | 319/656-2767 | Tony Hancock, LEPC Chair<br>Washington County LEPC<br>Emergency Management Agency<br>Kalona, Iowa 52247 |
| Wayne County   | 515-873-4812 | Ralph Alshouse<br>Box 36<br>Seymour, Iowa 52590                                                         |

STATE OF IOWA

|                 |              |                                                                                                         |
|-----------------|--------------|---------------------------------------------------------------------------------------------------------|
| Webster County  | 515/573-3111 | Ray Andrew, LEPC Chair<br>Iowa-Illinois Gas & Electric<br>P.O. Box 519<br>Fort Dodge, Iowa 50501        |
| Winnebago Co.   | 515/582-2112 | Daniel Davis, LEPC Chair<br>Forest City Police<br>Box 373<br>Forest City, Iowa 50436                    |
| Winneshiek Co.  | 319/382-4996 | Howard Ness, LEPC Chair<br>Emergency Management Agency<br>Route #5<br>Decorah, Iowa 52101               |
| Woodbury County | 712/279-6550 | Gary Brown, LEPC Chair<br>Woodbury Co. LEPC<br>1432 Leech Ave.<br>Sioux City, Iowa 51101                |
| Worth County    | 515/454-2158 | Patrick Harnack, LEPC Chair<br>226E. Walnut<br>Manly, Iowa 50459                                        |
| Worth County    | 515-454-2158 | Ray Kaduce, LEPC Secretary<br>Emergency Management Agency<br>1000 Central Ave.<br>Northwood, Iowa 50459 |
| Wright County   | 515/532-3262 | Gene Sturgeon, LEPC Chair<br>Board of Supervisors<br>Courthouse<br>Clarion, Iowa 50525                  |

STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

ALLEN

(316) 365-2117

Ronald Moore Chairperson  
Allen County LEPC  
Allen County Courthouse  
1 North Washington  
Toia. KS 66749

ANDERSON

(913) 448-6797

Gary Benjamin Chairperson  
Anderson County LEPC  
315 Orange Street  
Garnett. KS 66032

ATCHISON

(913) 367-0216

Susie Pickman Chairperson  
Atchison County LEPC  
Courthouse  
Atchison. KS 66002

BARBER

(316) 886-5678

Chairperson  
Barber County LEPC  
% Sheriff's Office  
Medicine Lodge. KS 67104

BARTON

Marvin Leighton Chairperson  
Barton County LEPC  
P.O. Box 1089  
Great Bend. KS 67530

BOURBON

(316) 223-3800

Marvin Rankin Chairperson  
Bourbon County LEPC  
Bourbon County Courthouse  
210 South National  
Fort Scott. KS 66701

STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

BROWN (913) 486-2642  
Raymond Farrow Chairperson  
Brown County LEPC  
Horton Ambulance Service  
240 West 8th  
Horton, KS 66439

BUTLER (316) 321-3502  
Jean Plummer Chairperson  
Butler County LEPC  
323 1/2 North Main  
El Dorado, KS 67042

CHASE (316) 273-8341  
Marvin Adcock Chairperson  
Chase County LEPC  
KS Graphics  
Cottonwood Falls, KS 66845

CHAUTAUQUA (316) 725-5785  
Mike Champlin Chairperson  
Chautauqua County LEPC  
215 North Chautauqua  
Sedan, KS 67367

CHEROKEE  
Greg Sitton Chairperson  
Cherokee County LEPC  
Alleco Chemical  
P.O. Box 247  
Galena, KS 66739

CHEYENNE (913) 332-2401  
Gary Rogers Chairperson  
Cheyenne County LEPC  
P.O. Box 985  
St. Francis, KS 67756

STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

CLARK

Etheled Marshall Chairperson  
Clark County LEPC  
County Commissioner's Office  
Box 886  
Ashland, KS 67831

CLAY

Norman Rettig Chairperson  
Clay County LEPC  
P.O. Box 54  
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(913) 632-2575

CLOUD

Sam Budreau Chairperson  
Cloud County LEPC  
103 West 9th Street  
Box 402  
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(913) 243-3131

COFFEY

George E. Mills Chairperson  
Coffey County LEPC  
Coffey County Courthouse  
110 South 6th Street  
Burlington, KS 66839

(316) 364-2721

COMANCHE

L. E. Murphy Chairperson  
Comanche County LEPC  
307 North Chicago  
Coldwater, KS 67029

(316) 582-2966

COWLEY

Joe Shriver Chairperson  
Cowley County LEPC  
Arkansas City Fire Department  
115 South D Street  
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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

CRAWFORD

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Eldon Bedene Chairperson  
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401 East Melvin  
Arma, KS 66712

DECATUR

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Oberlin, KS 67749

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DONIPHAN

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Doniphan County LEPC  
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DOUGLAS

Bob Newton Chairperson  
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Planning & Preparedness Board  
111 East Eleventh  
Lawrence, KS 66044

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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

ELK

(316) 374-2108

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Elk County LEPC  
P.O. Box 127  
Howard, KS 67349

ELLIS

Wayne Schwartz Chairperson  
Ellis County LEPC  
Hays City Fire  
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ELLSWORTH

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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

GEARY

(913) 238-2261

Bill Kelly Chairperson  
Geary County LEPC  
% Geary County Sheriff's Office  
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Junction City, KS 66441

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Ron Achilles Chairperson  
Gove County LEPC  
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Graham County LEPC  
% James L. Pommerenn  
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Grant County LEPC  
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Wiley McFarland Chairperson  
Gray County LEPC  
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Cimarron, KS 67835

GREELEY

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Howard John Gibson Chairperson  
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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

GREENWOOD

(316) 583-6885

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Hamilton County LEPC  
Law Enforcement Center  
Syracuse, KS 67878

HARPER

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Attica, KS 67009

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Newton, KS 67114

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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
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Jackson Co. Emergency Preparedness  
Jackson County Courthouse  
Room 106  
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JEFFERSON

Dan Dailey Chairperson  
Jefferson County LEPC  
Ambulance Service Director  
Oskaloosa, KS 66066

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(913) 578-3194

Roger Thelander Chairperson  
Jewell County LEPC  
Jewell Co. Emergency Preparedness  
320 West Monroe  
Mankato, KS 66956

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Michael B. Press Chairperson  
Johnson County LEPC  
Johnson County Med-Act  
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Olathe, KS 66061-3421

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Dr. Emmett Child Chairperson  
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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

KIOWA

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Greensburg, KS 67054

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Labette County Emergency Mgmt.  
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Delmer Dunnam Chairperson  
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Leavenworth County LEPC  
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Leavenworth, KS 66048

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Victor Suelter Chairperson  
Lincoln County LEPC  
% Lincoln County Clerk  
Lincoln County Courthouse  
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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

LOGAN

(913) 672-4249

Don Smith Chairperson  
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215 Hudson  
Oakley, KS 67748

LYON

(316) 342-0877

Steven Davis Chairperson  
Lyon County LEPC  
Lyon County Courthouse  
Commission Office  
402 Commercial  
Emporia, KS 66802

MARION

Chairperson  
Marion County LEPC  
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Marion, KS 67861

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(913) 562-3141

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Marysville, KS 66508

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McPherson County LEPC  
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MCPHERSON

Randy Easter Co-Chairperson  
McPherson County LEPC  
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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

MEADE

(316) 873-2206

Leon Reimer Chairperson  
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Meade County Appraiser's Office  
Box 278  
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MIAMI

(913) 294-3232

Gerald Lucas Chairperson  
Miami County LEPC  
% Sheriff's Office  
120 S. Pearl  
Paola, KS 66071

MITCHELL

(913) 738-2378

Robert Patterson Chairperson  
Mitchell County LEPC  
% Del Goheen  
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Beloit, KS 67420

MONTGOMERY

(316) 251-4000

John Blandamer Chairperson  
Montgomery County LEPC  
300 East Locust  
Independence, KS 67301

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(316) 767-6115

John Hultgren Chairperson  
Morris County LEPC  
220 North Chautauqua  
Council Grove, KS 66846

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(316) 697-4621

Joe Hartman Chairperson  
Morton County LEPC  
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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

NEMAHA

(913) 336-2631

Ray E. Downing, III Chairperson  
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James L. Kinne Chairperson  
Neosho County LEPC  
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NESS

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Charles Halbleib Chairperson  
Ness County LEPC  
222 West Main  
Ness City, KS 67560

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(913) 877-2652

Alvin Mapes Chairperson  
Norton County LEPC  
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OSAGE

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Bryce Romine Chairperson  
Osage County LEPC  
820 Gum  
Lyndon, KS 66451

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Don Kiper Chairperson  
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Osborne, KS 67473

STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

OTTAWA (913) 392-2346  
Carl McGavran Chairperson  
Ottawa County LEPC  
% Janice Davidson, Coordinator  
Ottawa County Courthouse  
Minneapolis, KS 67467

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Tim Gross Chairperson  
Pawnee County LEPC  
P.O. Box 480  
Larned, KS 67550

PHILLIPS (913) 543-2156  
William W. Kaumans Chairperson  
Phillips County LEPC  
P.O. Box 16  
Phillipsburg, KS 67661

POTTAWATOMIE (913) 457-3359  
James Keating Chairperson  
Pottawatomie County LEPC  
611 W. Lasley  
St. Marys, KS 66536

PRATT (316) 672-7395  
Mark McManaman Chairperson  
Pratt County LEPC  
P.O. Box 885  
Pratt, KS 67124

RAWLINS (913) 626-3637  
Chairperson  
Rawlins County LEPC  
512 South Railroad  
Atwood, KS 67730



STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

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Rick VanBuren Chairperson  
Reno County LEPC  
Kansas Power and Lights  
3200 East 30th  
Hutchinson, KS 67502

REPUBLIC

Steven T. Zukowske Chairperson  
Republic County LEPC  
% Republic County EOC (Basement)  
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Belleville, KS 66935

(913) 527-5691

RICE

Gary Spellman Chairperson  
Rice County LEPC  
402 South College  
Lyons, KS 67554

(316) 257-2386

RILEY

Larry Reese Chairperson  
Riley County LEPC  
Manhattan City Fire Dept.  
Headquarters Building  
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Mannattan, KS 66502

ROOKS

Michel Werth Chairperson  
Rooks County LEPC  
115 North Walnut  
Stockton, KS 67669

(913) 425-6818

RUSH

Jim Warner Chairperson  
Rush County LEPC  
715 Elm  
LaCrosse, KS 67548

(913) 222-2578

STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

RUSSELL

(913) 483-6311

Earl Hemphill Chairperson  
Russell County LEPC  
Russell City Fire Department  
P.O. Box 112  
Russell, KS 67665

SALINE

(913) 825-1671

Steve Ascher Chairperson  
Saline County LEPC  
3019 Scanlan Ave.  
Salina, KS 67401

SCOTT

(316) 872-5811

Kelley Scheffe Chairperson  
Scott County LEPC  
310 E. 3rd  
Scott City, KS 67871

SEDGWICK

(316) 383-7546

Michael L. Rudd, Deputy Chief, Chairperson  
Sedgwick County LEPC  
Wichita Fire Dept.  
City Hall, 11th Floor  
455 North Main  
Wichita, KS 67202

SEWARD

(316) 626-3267

Mike Tabor Chairperson  
Seward County LEPC  
P.O. Box 1194  
Liberal, KS 67901

SHAWNEE

(913) 291-4152

Keith Pierce Chairperson  
Shawnee County LEPC  
Shawnee County Courthouse  
200 East Seventh - Sub-basement 10  
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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

SHERIDAN

(913) 675-3361

Tom Jamison Chairperson  
Sheridan County LEPC  
P.O. Box 899  
Hoxie, KS 67740

SHERMAN

(913) 899-7581

Anthony DiPlacito Chairperson  
Sherman County LEPC  
P.O. Box 764  
Goodland, KS 67735-3051

SMITH

(913) 232-6651

J. C. Chance Chairperson  
Smith County LEPC  
R. #1  
Smith Center, KS 66967

STAFFORD

Leonard Getty Chairperson  
Stafford County LEPC  
826 North Broadway  
St. John, KS 67576

STANTON

(316) 492-6866

James R. Garrison Chairperson  
Stanton County LEPC  
Box 520  
Johnson, KS 67855

STEVENS

Opal Hall Chairperson  
Stevens County LEPC  
County Clerk's Office  
Stevens County Courthouse  
Hugoton, KS 67951

STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

SUMNER

Russ Whorley Chairperson  
Sumner County LEPC  
County Courthouse  
Wellington, KS 67152

THOMAS

(913) 462-3474

Bob McLemore Co-Chairman  
Thomas County LEPC  
615 N. Court Ave.  
Colby, KS 67701-2426

THOMAS

(913) 462-6148

Lee A. Strickler Co-Chairman  
Thomas County LEPC  
585 N. Franklin  
Colby, KS 67701

TREGO

(913) 743-5721

Nancy Tomanek Chairperson  
Trego County LEPC  
Trego Co. Emergency Preparedness  
525 Warren  
Wakeeney, KS 67672

WABAUNSEE

Maurice Gleason Chairperson  
Wabaunsee County LEPC  
% County Clerk's Office  
215 Kansas  
Alma, KS 66401

WALLACE

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Helen Penn Chairperson  
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STATE OF KANSAS

LOCAL EMERGENCY PLANNING COMMITTEE  
CHAIRPERSON LIST

WASHINGTON

(913) 325-2293

Ben Tice Chairperson  
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WICHITA

(316) 375-2723

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WILSON

(316) 378-4451

Paul Peters Chairperson  
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WOODSON

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Burdette Mentzer Chairperson  
Woodson County LEPC  
& Emergency Preparedness Office  
Woodson County Courthouse  
Yates Center, KS 66783

WYANDOTTE

(913) 321-4803

Dennis Hays Chairperson  
Deputy City Administrator  
Wyandotte County LEPC  
Kansas City-Wyandotte County  
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**LOCAL EMERGENCY  
PLANNING COMMITTEE (LEPC)  
ADDRESSES FOR SUBMITTING FORM AND INFORMATION**

---

**ADAIR COUNTY LEPC**

Bill Novinger  
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**ANDREW COUNTY  
MO-KAN REGIONAL LEPC**

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J.W. Tolson  
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Audrain County Courthouse  
Mexico, MO 65265  
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**BARRY COUNTY LEPC**

Lloyd Dilbeck  
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Barry County Courthouse  
Cassville, MO 65625  
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**BARTON COUNTY LEPC**

Gary Frieden  
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417/682-3529

**BATES COUNTY LEPC**

Everett Cummins  
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**BENTON COUNTY LEPC**

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MISSOURI EMERGENCY RESPONSE COMMISSION  
LIST OF LOCAL EMERGENCY PLANNING COMMITTEES (LEPC)

MULTI-COUNTY LOCAL EMERGENCY PLANNING DISTRICT (LEPD)

| <u>Multi-County Name</u>                                                                                                               | <u>Counties</u>                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Boonslick Emerg. Planning Committee<br>Terry Henderson<br>516B South Highway 47<br>P.O. Box 429<br>Warrenton, MO 63383<br>314/456-3473 | Lincoln<br>Montgomery<br>Warren                                                                |
| Bootheel Emerg. Planning Committee<br>Dan Bollinger<br>P.O. Box 397<br>Malden Industrial Park<br>Malden, MO 63863<br>314/276-2242      | Dunklin<br>New Madrid<br>Pemiscot<br>Scott<br>Stoddard                                         |
| East-West Gateway Network<br>Heien Buchmann<br>911 Washington<br>St. Louis, MO 63101<br>314/421-4220                                   | Franklin<br>Jefferson<br>St. Charles<br>St. Louis County                                       |
| Green Hills Emergency Planning Committee<br>Michael R. Johns<br>515 Main Street<br>Trenton, MO 65683<br>816/359-5636                   | Caldwell<br>Davies<br>Grundy<br>Harrison<br>Linn<br>Livingston<br>Mercer<br>Putnam<br>Sullivan |

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Phelps  
Washington

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HAYES

Stanley Rucker  
Box 25  
Hayes Center, NE 69032  
Business: (308) 286-3214

HOLT

Charles Fox (Sheriff)  
204 No. 4th Street  
P.O. Box 146  
O'Neill, NE 68763  
Business: (402) 336-2850

HOWARD

Sheriff Ron Bryer  
612 Indian St.  
St. Paul, NE 68873  
Business: (308) 754-5433  
FAX: (308) 754-5517

HALL

Bob Schwartzkopf, LEPC  
LEPC Chairman  
c/o Civil Defense  
P.O. Box 1968  
Grand Island, NE 68802-1968  
Home: (308) 381-8185  
Business: (308) 381-5360  
Office: (308) 381-5097

HARLAN

Chris Becker  
P.O. Box 679  
Alma, NE 68920  
Home: (308) 928-3163  
Business: (308) 928-2147  
FAX: (308) 928-2592

HITCHCOCK

Larry K. Forch, Jr.  
P.O. Box 7  
Stratton, NE 69043  
Home: (308) 276-2633  
Business: (308) 276-2327

HOOKER

Rich Kvarvig  
Box 213  
Mullen, NE 69152  
Business: (308) 546-2290

JEFFERSON

Rick Carmichael  
606 3rd Street  
Fairbury, NE 68352  
Business: (402) 729-3355

JOHNSON

Stan Osterhoudt  
RR 3, Box 29  
Tecumseh, NE 68450  
Home: (402) 335-3880

KEITH

Joe Humphrey  
410 E. 2nd Street  
Ogallala, NE 69153  
Home: (308) 284-4361  
Business: (308) 284-2024  
FAX: (308) 284-6565

KIMBALL

Melvin Plummer  
1000 10th Ave. Courthouse  
Sidney, NE 69162  
Home: (308) 254-2469  
Business: (308) 235-3332

LANCASTER

Norm Francis  
555 S. 10th  
Lincoln, NE 68508  
Home: (402) 467-1941  
Business: (402) 441-7441

LOGAN

James Wonch  
504 "F" Street  
Stapleton, NE 69163  
Home: (308) 636-2600  
Business: (308) 636-2288

KEARNEY

Jim Huff  
P.O. Box 125  
Minden, NE 68959  
Home: (308) 832-1150  
FAX: (308) 832-0946

KEYA PAHA

Ted Eichenberger  
RR 3, Box 33  
Springview, NE 68778  
Home: 497-3261  
Business: 497-3791

KNOX

Donald Schwartz  
Route 1, Box 12  
Winnetoon, NE 68789  
Business: (402) 847-3264

LINCOLN

Al Zook  
715 South Jeffers Street  
North Platte, NE 69101  
Home: (308) 532-5926  
Business: (308) 532-7383

LOUP

Tom McNeil, Sr.  
HC 65, Box 24  
Taylor, NE 68879  
Home: (308) 942-6285  
Business: (308) 942-3135

MADISON

Helen Bergland  
P.O. Box 864  
Norfolk, NE 68702  
Home: (402) 371-1401  
Business: (402) 644-8758

MERRICK

Sheriff Dan Schnerheiz  
1821 16th Avenue  
Central City, NE 68826  
Business: (308) 946-2345

NANCE

Vern Olson  
Nancy Co. Courthouse  
208 Ester St.  
Fullerton, NE 68638  
Home: (308) 536-2337  
Cellular: (308) 649-2194  
FAX: (308) 536-2453

NUCKOLLS

Leo Zadina  
Courthouse  
Nelson, NE 68961  
Home: 879-3974  
Business: 225-2361

PAWNEE

John F. Schulze  
Pawnee Co. Sheriff Dept.  
625 6th St.  
Pawnee City, NE 68420  
Home: (402) 877-4345  
Business: (402) 877-4345

MCPHERSON

Richard Black  
Box 34  
Tryon, NE 69167  
Business: (308) 587-2435

MORRILL

Rudy Sides  
P.O. Box 281  
Bridgeport, NE 69336  
Home: (308) 262-1668  
Business: (308) 262-1361  
FAX: (308) 262-0664

NEMAHA

Dave Thomas  
515 Alden Drive  
Auburn, NE 68305  
Home: 274-5520  
Business: 274-3355

OTOE

Jim Roe  
1503 Central Avenue  
Nebraska City, NE 68410  
Home: (402) 873-7693  
Business: (402) 873-4588

PERKINS

Terry Wendell  
Box 713  
Grant, NE 69140  
Business: (308) 352-4224

PHELPS

Jim Wagner  
611 3rd Avenue  
Holdrege, NE 68949  
Home: (308) 995-4343  
Business: (308) 995-8001

PLATTE

Dean Hefti  
2159 37th Ave.  
Columbus, NE 68601  
Home: (402) 564-7062  
Business: (402) 564-0514  
Cellular: (402) 649-2112

RED WILLOW

Gene Mahon  
Shern's Dept.  
502 Norris Avenue  
McCook, NE 69001  
Business: (308) 345-1850

ROCK

Merlin Helm  
HC 78, Box 93  
Bassett, NE 68714  
Home: (402) 684-3778  
Business: (402) 684-3600

SARPY

Jack Wilhelm  
1220 Limmerick Road  
Papillion, NE 68046  
Business: (402) 339-2666  
Home: (402) 339-9820

PIERCE

Donald D. Betts  
509 No. 4th Street  
P.O. Box 247  
Plainview, NE 68769  
Home: (402) 582-3746

POLK

Steve L. Cherry  
Box 567  
Osceola, NE 68651  
Business: 747-2231

RICHARDSON

Stephen Hoffman  
1713 Fulton Street  
Falls City, NE 68355  
Home: 245-3629

SALINE

Henry Dankeogger  
DeWitt, NE 68341  
Home: (402) 826-5527

SAUNDERS

Don Gerny  
262 W. 5th  
Wahoo, NE 68066  
Home: 642-5251  
Business: 443-3414  
FAX: (402) 443-4441

SCOTTSBLUFF

Don Paetow (Chairman)  
Sherry Blaha  
1825 - 10th  
Gering, NE 69341  
Business: (308) 436-6689

SHERIDAN

Al Hemmingsen  
Box 426  
Chadron, NE 69337  
Home: (308) 432-5274  
Business: (308) 432-2251

SIOUX

Al Hemmingsen  
Box 426  
Chadron, NE 69337  
Home: (308) 432-5274  
Business: (308) 432-2251

THAYER

Leo Zadina  
Courthouse  
Nelson, NE 68961  
Home: 879-3974  
Business: 225-2361

THURSTON

Harold Obermeyer  
P.O. Box 370  
Pender, NE 68047  
Home: (402) 385-2109  
Business: (402) 385-3018  
FAX: (402) 385-2518

SEWARD

Warren Erickson  
261 So. 8th  
Seward, NE 68434  
Business: (402) 643-4722

SHERMAN

Jim Kowalski  
Box 597  
Loup City, NE 68853  
Home: (308) 745-0765

STANTON

Sanford Goshorn  
1307 N. 8th  
Stanton, NE 68779  
Home: 439-2631  
Business: 395-2164

THOMAS

Steven A. Peterson  
Sheriff's Office  
Thedford, NE 69166  
Home: (308) 645-2418  
Business: (308) 645-2261

VALLEY

Clarence Fox  
1817 "N" Street  
Ord, NE 68862  
Home: (308) 728-5657

WASHINGTON

Reggie Wulf  
1035 James Drive  
Blair, NE 68008  
Home: 426-5001  
Business: 426-4131

WEBSTER

Leo Zadina  
Courthouse  
Nelson, NE 68961  
Home: 879-3974  
Business: 225-2361

YORK

Orville R. Davidson  
612 Nebraska Ave.  
York, NE 68467  
Home: 362-4600  
Business: 362-4407

WAYNE

Wayne Denkiau  
510 Pearl  
Wayne, NE 68787  
Home: 286-4830  
Business: 286-2764

WHEELER

Kathleen Sheldon  
Spalding, NE 68665  
Home: (308) 497-2163

## APPENDIX D.2

### REGION VII SERCs



## **Region VII SERCs**

- IOWA:**     **Mr. Walter Johnson, Chair**  
**Iowa Emergency Response Commission**  
**Deputy Commissioner, Division of Labor**  
**1000 East Grand Avenue**  
**Des Moines, Iowa 50319**  
**(515) 281-3445**  
**FAX (515) 242-6301**
- KANSAS**   **Mr. Edward C. Redmon, Chair**  
**Kansas Emergency Response Commission**  
**State Fire Marshall Department**  
**700 S.W. Jackson, Suite 600**  
**Topeka, Kansas 66603-3714**  
**(913) 296-3401**  
**FAX (913) 296-0151**
- MISSOURI**   **Mr. Stephen Paulsell, Chair**  
**Missouri Emergency Response Commission**  
**Boone County fire Protection District**  
**1520 Business Loop 70 West**  
**Columbia, Missouri 65202**  
**(314) 874-7455**
- NEBRASKA**   **Major General Stanley M. Heng, Chair**  
**Nebraska Emergency Response Commission**  
**1300 Military Road**  
**Lincoln, Nebraska 68508-1090**  
**(402) 473-1100**  
**FAX (402) 473-1433**

## **APPENDIX D.3**

### **REGION VII RRT MEMBER LIST**

Revision 1  
December, 1994

FEDERAL REGION VII  
STANDING RRT MEMBERSHIP

Co-Chairman: CAPTAIN Robert Luchun U.S. Coast Guard  
Second Coast Guard  
District

Co-Chairman: Mr. Ron McCutcheon Environmental Protection  
Agency, Region VII

-----

EPA

Environmental Protection Agency . . . . (PRIM): Ron McCutcheon  
Laboratory (ENSV) WORK: (913) 551-5007  
25 Funston Road EPA E-MAIL: EPA9780  
Kansas City, KS 66115 NOAA E-MAIL: R7EPA  
24-HOUR NO: (913) 236-3778  
FAX: (913) 551-5035

Environmental Protection Agency . . . . (ALT): Carol Kather  
Laboratory (ENSV) WORK: (913) 551-5037  
25 Funston Road EPA E-MAIL: EPA9780  
Kansas City, KS 66115 NOAA E-MAIL: R7EPA  
24-HOUR NO: (913) 236-3778  
FAX: (913) 551-5035

DOT

USCG

U.S. Coast Guard . . . . . (PRIM): CAPT Robert Luchun  
Second Coast Guard District (m) WORK: (314) 539-2655  
1222 Spruce Street, Room 2.102G EPA E-MAIL: EPA97022  
St. Louis, MO 63103-2832 NOAA E-MAIL: CGD2  
24-HOUR NO: (314) 539-3706  
FAX: (314) 539-2649

U.S. Coast Guard . . . . . (1st ALT): CDR Ed Morris  
Second Coast Guard District (meps) WORK: (314) 539-2655  
1222 Spruce Street, Room 2.102G EPA E-MAIL: EPA97022  
St. Louis, MO 63103-2832 NOAA E-MAIL: CGD2  
24-HOUR NO: (314) 539-3706  
FAX: (314) 539-2649

U.S. Coast Guard. . . . . (CO): CAPT Scott Cooper  
Second Coast Guard District WORK: (314) 539-3091  
Commanding Officer EPA E-MAIL: EPA97022  
Marine Safety Office NOAA E-MAIL: MSOSTL  
1222 Spruce Street, Room 1.215 24-HOUR NO: (314) 539-3091  
St. Louis, MO 63103-2832 FAX: (314) 539-2659

U.S. Coast Guard . . . . . (RRT COOR): CDR Mike Schafersman  
Second Coast Guard District (meps-1) WORK: (314) 539-2655  
1222 Spruce St., Room 2.102G EPA E-MAIL:  
St. Louis, MO 63103-2832 NOAA E-MAIL: MSOSTL  
24-HOUR NO: (314) 539-3706  
FAX: (314) 539-2649

FHWA

Federal Highway Administration . . . . . (PRIM): Fred McGraw  
HAZMAT Program Manager WORK: (816) 276-2700  
6301 Rockhill Road EPA E-MAIL: EPA97014  
P.O. Box 419715 NOAA E-MAIL:  
Kansas City, MO 64141 24-HOUR NO:  
FAX: (816) 363-3347

USDA

Department of Agriculture . . . . . (PRIM): Bob Willis  
USDA Forest Service WORK: (314) 364-4621  
Mark Twain National Forest EPA E-MAIL: None  
401 Fairgrounds Road NOAA E-MAIL: Pending  
Rolla, MO 65401 24-HOUR NO: Answering  
Machine: (314) 364-4621  
FAX: (314) 341-7475

Department of Agriculture . . . . . (1st ALT): Dave Easter  
USDA Forest Service WORK: (314) 364-4621  
Mark Twain National Forest EPA E-MAIL: None  
401 Fairgrounds Road NOAA E-MAIL: Pending  
Rolla, MO 65401 24-HOUR NO: Answering  
Machine: (314) 364-4621  
FAX: (314) 341-7475

Department of Agriculture . . . . . (2nd ALT): Pat Hughes  
USDA Forest Service WORK: (314) 364-4621  
Mark Twain National Forest EPA E-Mail: None  
401 Fairgrounds Road NOAA E-Mail: Pending  
Rolla, MO 65401 24-HOUR NO: Answering  
Machine: (314) 364-4621  
FAX: (314) 341-7475

DOD

United States Army . . . . . (PRIM): Jerry Unwin  
Headquarters - 5th U.S. Army WORK: (210) 221-9320  
ATTN: AFKB-OP-P (Contingency Plans Br.) EPA E-MAIL: EPA97015  
Ft. Sam Houston, TX 78234-7000 NOAA E-MAIL: R7ARMY  
24-HOUR NO: (210) 221-2901  
(210) 221-0017  
FAX: (210) 221-9485

United States Army . . . . . (ALT): Tom Hendricks  
Headquarters - 5th U.S. Army WORK: (210) 221-1772  
ATTN: AFKB-OP-E EPA E-MAIL: EPA97015  
(Current Operations Br.) NOAA E-MAIL: R7ARMY  
Ft. Sam Houston, TX 78234-7000 24-HOUR NO: (210) 221-2901  
(210) 221-0017  
FAX: (210) 221-0301

USAF

AFCEE/CCR-D. . . . . (PRIM): Raymond Bruntmyer  
525 S. Griffin St., Suite 505 WORK: (214) 767-4668  
Dallas, TX 75202-5023 EPA E-MAIL: EPA97016  
NOAA E-MAIL: R7USAF  
24-HOUR NO: --NONE  
FAX: (214) 767-4661

AFCEE/CCR-D . . . . . (ALT): Thomas Manning  
525 S. Griffin St., Suite 505 WORK: (214) 767-4669  
Dallas, TX 75202-5023 EPA E-MAIL: EPA97016  
NOAA E-MAIL: R7USAF  
24-HOUR NO: --NONE--  
FAX: (214) 767-4661

AFCEE/CCR-D (POC): Craig Bernstein  
525 S. Griffin St., Suite 505 WORK: (214) 767-7688  
Dallas, TX 75202-5023 EPA E-MAIL:  
NOAA E-MAIL:  
24-HOUR NO: --NONE--  
FAX: (214) 767-4661

COE

U.S. Army Corps of Engineers . . . . . (PRIM): Doug Strohbehn  
Missouri River Division WORK: (402) 697-2539  
P.O. Box 103 DTS EPA E-MAIL: EPA97013  
Omaha, NE 68101-0103 NOAA E-MAIL: R7COE  
24-HOUR NO: (402) 697-2539  
FAX: (402) 697-2547

DOE

U.S. Department of Energy . . . . . (PRIM): David Hampton  
DOE Kansas City Area Office WORK: (816) 997-7005  
P.O. Box 410202 EPA E-MAIL: EPA97012  
Kansas City, MO 64141 NOAA E-MAIL: R7DOE2  
24-HOUR NO:  
FAX: (816) 997-7310

U.S. Department of Energy . . . . . (ALT): Pat Hoopes  
DOE Kansas City Area Office WORK: (816) 997-7003  
P.O. Box 410202 EPA E-MAIL: EPA97012  
Kansas City, MO 64141 NOAA E-MAIL: R7DOE2  
24-HOUR NO:  
FAX: (816) 997-7310

DOI

Regional Environmental Officer . . . (PRIM): Robert F. Stewart  
Department of the Interior WORK: (303) 236-6900  
Denver Federal Center EPA E-MAIL: EPA97019  
P.O. Box 25007, (D-108) NOAA E-MAIL: R8DOI  
Denver, CO 80225 24-HOUR NO: none  
FAX: (303) 236-4093

Department of the Interior . . . . . (ALT): William C. Allan  
Denver Federal Center WORK: (303) 236-6900  
P.O. Box 25007, (D-108) EPA E-MAIL: EPA97019  
Denver, CO 80225 NOAA E-MAIL: R8DOI  
24-HOUR NO: none  
FAX: (303) 236-4093

(a) Iowa and Missouri

Regional Pollution Response Coord. . . (PRIM): Terence J. Miller  
U.S. Fish and Wildlife Service WORK: (612) 725-3536  
Twin Cities, MN 55111 EPA E-MAIL: EPA97020  
NOAA E-MAIL: R7DOI  
24-HOUR NO: none  
FAX: (612) 725-3526

Alternate Regional Pollution Response (ALT): Stan Smith  
Coordinator (WORK): (612) 725-3536  
U.S. Fish and Wildlife Service EPA E-MAIL: EPA97020  
Federal Building, Ft. Snelling NOAA E-MAIL: R7DOI2  
Twin Cities, MN 55111 24-HOUR NO: none  
FAX: (612) 725-3526

(b) Kansas and Nebraska

U.S. Fish and Wildlife Service  
P.O. Box 25486  
Denver, CO 80225

(PRIM): Patty Stevens  
WORK: (303) 236-8180  
EPA E-MAIL:  
NOAA E-MAIL:  
24-HOUR NO: none  
FAX: (303) 236-0027

U.S. Fish and Wildlife Service  
P.O. Box 25486  
Denver, CO 80225

(ALT): Tom Jackson  
WORK: (303) 236-8180  
EPA E-MAIL:  
NOAA E-MAIL:  
24-HOUR NO: none  
FAX: (303) 236-0027

HHS

Dept. of Health and Human Services  
601 East 12th Street, Room 501  
Kansas City, MO 64106

(PRIM): CDR Michael B. Anderson  
WORK: (816) 426-5291  
EPA E-MAIL: EPA97018  
NOAA E-MAIL: R7HHS  
24-HOUR NO:  
FAX: (816) 426-3457

Dept. of Health and Human Services  
ATSDR  
726 Minnesota Ave.  
Kansas City, KS 66101

(ALT): David Parker  
WORK: (913) 551-7772  
EPA E MAIL:  
NOAA E-MAIL:  
24-HOUR NO:  
FAX:

DOL

USDOL/OSHA/REGION VII . . . . .  
911 Walnut, Room 406  
Kansas City, MO 64106

(PRIM): Janice Barrier  
WORK: (816) 426-5861  
EPA E-MAIL: EPA97021  
NOAA E-MAIL: R7DOL  
24-HOUR NO: (816) 426-5861  
FAX: (816) 426-2750

USDOL/OSHA/REGION VII. . . . .  
911 Walnut, Room 406  
Kansas City, MO 64106

(ALT): Glenn Taylor  
WORK: (816) 426-5861  
EPA E-MAIL: EPA97021  
NOAA E-MAIL: R7DOL  
24-HOUR NO: (816) 426-5861  
FAX: (816) 426-2750

## FEMA

Federal Emergency Management Agency . . (PRIM): James A. Donley  
PT&E. Tech. Haz. Prog. Spec. WORK: (816) 283-7010  
FEMA Region VII EPA E-MAIL: EPA97023  
911 Walnut, Room 200 NOAA E MAIL: R7FEMA  
Kansas City, MO 64106 24-HOUR NO: (816) 283-7060  
FAX (816) 283-7098

Federal Emergency Management Agency . . (ALT): Robert Bissell  
Training, Exercise, & Evaluation WORK: (816) 283-7004  
FEMA Region VII EPA E-MAIL: EPA97023  
911 Walnut, Room 200 NOAA E MAIL: R7FEMA  
Kansas City, MO 64106 24-HOUR NO: (816) 283-7060  
FAX: (816) 283-7098

## NRC

Dir. Division of Radiation Safety & . (PRIM): Leonard J. Callon  
Radiological Safeguards WORK: (817) 860-8160  
Nuclear Regulatory Commission EPA E-MAIL: EPA97024  
611 Ryan Plaza Drive, Suite 1000 NOAA E MAIL: R7NRC  
Arlington, TX 76001 24-HOUR NO:  
FAX: (817) 860-8122

Emergency Response Coordinator . . . . (ALT): Gene Bates  
Nuclear Regulator Commission WORK: (817) 860-8233  
611 Ryan Plaza Drive, Suite 1000 EPA E-MAIL: EPA97024  
Arlington, TX 76001 NOAA E MAIL: R7NRC  
24-HOUR NO:  
FAX: (817) 860-8122

## DOC

Department of Commerce . . . . . (PRIM): David Runyan  
Central Regional Office WORK: (816) 426-3239  
National Weather Service, NOAA EPA E-MAIL: EPA97026  
601 East 12th Stret, Room 1836 NOAA E MAIL: R7DOC  
Kansas City, MO 64106 24-HOUR NO: (816) 243-3600  
FAX: (816) 426-3270



DOJ

Environmental Enforcement Section . . . (PRIM): Mike McNulty  
Department of Justice, Room 2616 WORK: (202) 514-1210  
P.O. Box 7611 EPA E-MAIL: EPA97027  
Benjamin Franklin Station NOAA E MAIL: R7DOJ  
Washington, D.C. 10044 24-HOUR NO: - None -  
FAX: (202) 514-8395

DOJ Vessel Spills (ALT): Scott Blaze  
P.O. Box 14271 WORK: (202) 501-7346  
Washington, D.C. 20044-4271 EPA E-MAIL: EPA97027  
NOAA E MAIL: R7DOJ  
24 HOUR NO: - None -  
FAX: (202) 514-8395

GSA

General Services Administration (PRIM): Wayne Cooper  
1500 East Bannister Road (6CA) WORK: (816) 926-7222  
Kansas City, MO 64131 EPA E-MAIL: NONE  
NOAA E MAIL: NONE  
24 -Hr: 926-7500  
FAX: (816) 926-7981

General Services Administration . . . (ALT): Jim Van Hooser  
1500 East Bannister Road (6CA) WORK: (816) 926-7582  
Kansas City, MO 64131 EPA E-MAIL: NONE  
NOAA E MAIL: NONE  
24-Hr: 926-7500  
FAX: (816) 926-7981

STATE REPRESENTATIVES, RRT

IOWA

Iowa Department of Natural Resources . (PRIM): Ron Kozel  
Environmental Protection Division WORK: (515) 281-8883  
Wallace Building EPA E-MAIL: EPX2412  
900 East Grand NOAA E MAIL: R7IO  
Des Moines, IA 50319 24-HOUR NO: (515) 281-8694  
FAX: (515) 281-8895

Iowa Department of Natural . . . . . (ALT): Pete Hamlin  
Resources WORK: (515) 281-8852  
Wallace Building EPA E-MAIL: EPX2412  
900 East Grand NOAA E MAIL: R7IO  
Des Moines, IA 50319 24-HOUR NO: (515) 281-8694  
FAX: (515) 281-8895

KANSAS

Kansas Department of Health and . . . (PRIM): Larry Knoche  
Environment WORK: (913) 296-1662  
Forbes Field EPA E-MAIL: EPX2512  
Topeka, KS 66620 NOAA E MAIL: R7KS  
24-HOUR NO: (913) 296-1500  
FAX: (913) 296-1686

Kansas Department of Health and . . . (ALT): G. Paul Belt  
Environment WORK: (913) 296-1679  
Forbes Field EPA E-MAIL: EPX2512  
Topeka, KS 66620 NOAA E MAIL: R7KS  
24 HOUR NO: (913) 296-1500  
FAX: (913) 296-1686

MISSOURI

Missouri Department of Natural . . . (PRIM): Jim Long  
Resources WORK: (314) 526-3344  
Environmental Emergency Response EPA E-MAIL: EPX3412  
P.O. Box 176 NOAA E-MAIL: R7MO  
Jefferson City, MO 65102 24-Hour NO: (314) 634-2436  
FAX: (314) 526-3350

Missouri Department of Natural . . . (ALT): Ken Teeter  
Resources WORK: (314) 526-3375  
P.O. Box 176 EPA E-MAIL: EPX3412  
Jefferson City, MO 65102 NOAA E MAIL: R7MO  
24-HOUR NO: (314) 634-2436  
FAX: (314) 526-3350

**NEBRASKA**

State of Nebraska . . . . .  
Department of Environmental Quality  
P.O. Box 98922  
Lincoln, NE 68509

(PRIM): David Chambers  
WORK: (402) 471-4230  
EPA E-MAIL: EPX3612  
NOAA E MAIL: R7NE  
24-HOUR NO: (402) 471-4545  
FAX: (402) 471-2909

State of Nebraska . . . . .  
Department of Environmental Quality  
P.O. Box 98922  
Lincoln, NE 68509

(ALT): Kirk Morrow  
WORK: (402) 471-4230  
EPA E-MAIL: EPX3612  
NOAA E MAIL: R7NE  
24-HOUR NO: (402) 471-4545  
FAX: (402) 471-2909

State of Nebraska . . . . .  
Department of Environmental Quality  
P.O. Box 98922  
Lincoln, NE 68509

(ALT): Dale Busch  
WORK: (402) 471-4230  
EPA E-MAIL: EPX3612  
NOAA E MAIL: R7NE  
24-HOUR NO: (402) 471-4545  
FAX: (402) 471-2909

## **APPENDIX D.4**

### **AREA COMMITTEE MEMBERS**

**MEMBERSHIP IS THE SAME AS RRT**

**FOUND IN APPENDIX D.3**

**Revision 1  
December, 1994**

## APPENDIX D.5

### EMERGENCY CONTACTS LIST



## APPENDIX D.5

### EMERGENCY RESPONSE CONTACTS

|                                                   |              |
|---------------------------------------------------|--------------|
| National Response Center(NRC).....                | 800-424-8802 |
| USCG, Second District .....                       | 314-539-3706 |
| EPA, Region VII .....                             | 913-236-3778 |
| Iowa Department of Natural Resources .....        | 515-281-8694 |
| 24-hour Emergency Response                        |              |
| Kansas Dept. of Health & Environment .....        | 913-296-1500 |
| 24-hour Emergency Response                        |              |
| Missouri Dept. of Natural Resources .....         | 314-634-2436 |
| 24-hour Emergency Response                        |              |
| Nebraska Dept of Environmental Quality .....      | 402-471-4545 |
| 24-hour Emergency Response                        |              |
| Agency for Toxic Substance & Disease .....        | 404-347-4062 |
| Registry(ATSDR)                                   |              |
| American Petroleum Institute .....                | 202-682-8000 |
| Bureau of Explosives .....                        | 800-424-9300 |
| via CHEMTREC                                      |              |
| Centers for Disease Control(CDC) .....            | 404-639-2888 |
| Chemical Transportation Emergency .....           | 800-424-9300 |
| Center(CHEMTREC)                                  |              |
| Emergency Response Team .....                     | 908-321-6660 |
| National Pesticides Telecommunication Network ... | 800-858-7378 |
| National Pollution Fund Center(NPFC) .....        | 703-235-4756 |
| OSHA Hot-Line .....                               | 800-321-6742 |
| RCRA/CERCL Hot-Line .....                         | 800-424-9346 |
| Safe Drinking Water Act .....                     | 800-426-4791 |
| SARA/CEPP Hot-Line .....                          | 800-535-0202 |

Revision 1  
December, 1994





|                                                   |              |              |
|---------------------------------------------------|--------------|--------------|
| Scientific Support Coordinators(SSC)              | .....        | 202-526-6317 |
| NIOSH Technical Information                       | .....        | 800-356-4674 |
| National Fire Equipment System                    | .....        | 209-466-9512 |
| 7:45 - 4:15 Cen. Time                             | 817-334-2605 |              |
| 2:15 - 3:15 Pac. Time                             | 209-946-6382 |              |
| USCG National Strike Force Coordination Center .. |              | 919-331-6000 |
| Atlantic Strike Team                              | 609-724-0008 |              |
| Gulf Strike Team                                  | 205-639-6601 |              |

Revision 1  
December, 1994

**DEPARTMENT OF THE INTERIOR HAZARDOUS MATERIALS/OIL SPILL COORDINATORS**

**CONTACT LIST FOR IA, KS, MO, AND NE**

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## APPENDIX E

### FUND REIMBURSEMENT (NPFC)

UNDER DEVELOPMENT



## APPENDIX F

### REGION VII SPILL HISTORY

SION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

>>>>>>>> THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

| CASE NUMBER                                                                                      | RESPONSIBLE PARTY                   | MATERIAL (quantity)                           | SOURCE            |
|--------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------|-------------------|
| RPT-DATE                                                                                         | INCIDENT LOCATION                   |                                               | CAUSE             |
| RPT-TIME                                                                                         | CITY, ST., (CITY)                   |                                               | WATERWAY AFFECTED |
| 03089TJC1600                                                                                     | EXCEL CORP                          | #6 FUEL OIL (4000 gallons)                    | PIPELINE          |
| 03/08/89                                                                                         | NW 1/4 SEC 16 T17N R3E (WEST HWY 30 |                                               |                   |
| 0 HRS.                                                                                           | , NE (COLFAX)                       |                                               | NONE              |
| NATURE OF INCIDENT : 2" RETURN LINE CRACKED DUE TO FREEZING.                                     |                                     |                                               |                   |
| RESPONSE ACTION : COMPANY REPORTED THAT SPILL WAS CONTAINED & NO RELEASE TO ENVIRONMENT OCCURRED |                                     |                                               |                   |
| 12110MM 1600                                                                                     | KINLEY COMPANY                      | JP-4 JET FUEL (40000 gallons)                 | PIPELINE          |
| 12/11/90                                                                                         | CAPEHART ROAD (OVER PAPIO CREEK)    |                                               | EQUIPMENT FAILURE |
| 1600 HRS.                                                                                        | BELLEVUE, NE (SARPY)                |                                               | PAPIO CREEK       |
| NATURE OF INCIDENT : PIPELINE - NO SPILLAGE OCCURED YET AT TIME OF CALL.                         |                                     |                                               |                   |
| RESPONSE ACTION : REPAIRED. SECONDARY CONTAINMENT MEASURES SET UP DOWNSTREAM WHILE CREW WORKED.  |                                     |                                               |                   |
| 03179JW1050                                                                                      | MARATHON PIPELINE                   | CRUDE OIL (100 barrels)                       | PIPELINE          |
| 03/17/89                                                                                         | 4 MI ESE OF GURLEY                  |                                               |                   |
| 0 HRS.                                                                                           | GURLEY, NE (CHEYENNE)               |                                               | CREEK             |
| NATURE OF INCIDENT : 6" PIPELINE IS LEAKING                                                      |                                     |                                               |                   |
| RESPONSE ACTION : CLEANUP EQUIP INROUTE, SPILL IS CONTAINED, WILL USE VAC TRUCKS TO CLEAN UP.    |                                     |                                               |                   |
| MGF1200                                                                                          | AMOCO PRODUCTION CO.                | SALTWATER BRINE (8410 gallons)                | PIPELINE          |
| .6/88                                                                                            | HC ROUTE 6, T3N-R27W-SEC. 25 CC     |                                               |                   |
| 0 HRS.                                                                                           | INDIANOLA, NE (RED WILLOW)          |                                               | NONE              |
| NATURE OF INCIDENT : INJECTION LINE LEAK OF SALTWATER BRINE. MATERIAL RAN DOWN HILL & COLLECTED  |                                     |                                               |                   |
| RESPONSE ACTION : BACK-TRUCK TO PUSH COLLECTED MATERIAL, ABSORBANT PADS USED TO CLEAN UP OIL.    |                                     |                                               |                   |
| 11090GH 1200                                                                                     | CONOCO PIPELINE CO                  | GASOLINE: AUTOMOTIVE 4.23G PB/G (200 barrels) | PIPELINE          |
| 11/09/90                                                                                         |                                     |                                               |                   |
| 1257 HRS.                                                                                        | NORTH PLATTE, NE (LINCOLN)          |                                               |                   |
| NATURE OF INCIDENT :                                                                             |                                     |                                               |                   |
| RESPONSE ACTION : STOP SPRAY AND FIXING EQUIPMENT. PICKING UP REMAINING MATERIAL.                |                                     |                                               |                   |

REGION VII  
02/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE

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| CASE NUMBER                                                                                         | RESPONSIBLE PARTY                                                                             | MATERIAL (quantity)                             | SOURCE<br>CAUSE<br>WATERWAY AFFECTED                                     |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------|
| 02281MM 1520<br>02/28/91<br>1520 HRS.                                                               | FARMLAND INDUSTRIES<br>PANHANDLE CO-OP ASSOC.<br>BRIDGEPORT, NE (MORRILL)                     | GASOLINE: AUTOMOTIVE (4.23G PB/G (1100 gallons) | FIXED FACILITY<br>OPERATIONAL ERROR                                      |
| NATURE OF INCIDENT :                                                                                |                                                                                               |                                                 |                                                                          |
| RESPONSE ACTION : COMPANY CLEANUP WITH STATE MONITORING. WILL EXCAVATE THE CONTAMINATED SOIL.       |                                                                                               |                                                 |                                                                          |
| 07062M 2032<br>07/06/92<br>132 HRS.                                                                 | MONROE AUTO EQUIPMENT<br>121 MERIDIAN DR.<br>COZAD, NE (DAMSON)                               | HYDRAULIC OIL (500 gallons)                     | FIXED FACILITY<br>OPERATIONAL ERROR<br>STORM DRAIN--BARRON PIT<br>ON FAC |
| NATURE OF INCIDENT : PUMPING OUT RAIL CAR - OPERATOR ERROR.                                         |                                                                                               |                                                 |                                                                          |
| RESPONSE ACTION : PUMPING MATERIAL UP AND DIKED OFF THE STORM DRAIN.                                |                                                                                               |                                                 |                                                                          |
| 12198MGF1100<br>12/19/88<br>0 HRS.                                                                  | AMOCO PRODUCTION COMPANY<br>SLEEPY HOLLOW FIELD/WALL BATTERY FA<br>INDIANOLA, NE (RED WILLOW) | CRUDE OIL (2100 gallons)                        | FIXED FACILITY<br>NONE                                                   |
| NATURE OF INCIDENT : OIL SPILLED INTO A DRAIN. MIGRATED ABOUT 430 FT.                               |                                                                                               |                                                 |                                                                          |
| RESPONSE ACTION : APPLIED FRESH WATER. REMOVED BY VACUUM TRUCK, SPRAYED PETREGREEN, SOURCE PLUGGED. |                                                                                               |                                                 |                                                                          |
| 06200M 1127<br>06/21/90<br>15 HRS.                                                                  | WILLIAMS PIPELINE CO<br>5 BLKS SOUTH OF O ST ON SW 40TH ST<br>LINCOLN, NE (LANCASTER)         | OIL, FUEL: NO. 2 (11 barrels)                   | FIXED FACILITY<br>SOIL                                                   |
| NATURE OF INCIDENT :                                                                                |                                                                                               |                                                 |                                                                          |
| RESPONSE ACTION : MATERIAL WAS CONTAINED IN A DITCH AND A VACUUM TRUCK WAS USED TO RECOVER.         |                                                                                               |                                                 |                                                                          |
| 05261K 2055<br>05/26/91<br>2055 HRS.                                                                | UNION PACIFIC RAILROAD<br>SERVICE TRACKS MP MX-284E<br>NORTH PLATTE, NE (LINCOLN)             | OIL: DIESEL (3000 gallons)                      | FIXED FACILITY<br>EQUIPMENT FAILURE                                      |
| NATURE OF INCIDENT : PIPELINE TO LOCOMOTIVE REFUELING STATION FAILED.                               |                                                                                               |                                                 |                                                                          |
| RESPONSE ACTION : CONTRACTOR ENROUTE WITH VACUUM TRUCKS.                                            |                                                                                               |                                                 |                                                                          |

ICM VII  
2/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

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| CASE NUMBER                                                                                               | RESPONSIBLE PARTY                     | MATERIAL (quantity)            | SOURCE            |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------|--------------------------------|-------------------|
| RPT-DATE                                                                                                  | INCIDENT LOCATION                     |                                | CAUSE             |
| RPT-TIME                                                                                                  | CITY, ST., (CNTY)                     |                                | WATERWAY AFFECTED |
| 07028SB1620                                                                                               | Q'S RESTAURANT                        | GASOLINE (2500 gallons)        | ABOVE GROUND TANK |
| 07/02/88                                                                                                  | 3 MILE MARKER LAKE OZARK              |                                |                   |
| 1620 HRS.                                                                                                 | LAKE OZARK, MO (MILLER)               |                                | LAKE              |
| NATURE OF INCIDENT : ABOVEGROUND TANK RUPTURED DURING FILLING PROCESS & SPILLED 2,500 GAL.                |                                       |                                |                   |
| RESPONSE ACTION : ALL SPILLED MATERIAL CONSUMED BY FIRE.                                                  |                                       |                                |                   |
| 06129JW1240                                                                                               | AYERS OIL COMPANY                     | OILS: GASOLINE (15000 gallons) | ABOVE GROUND TANK |
| 06/12/89                                                                                                  | PHILLIPS 66 STATION                   |                                | UNKNOWN           |
| 1240 HRS.                                                                                                 | MEMPHIS, MO (SCOTLAND)                |                                | UNKNOWN           |
| NATURE OF INCIDENT : ABOVE GROUND TANK - LEAK WAS IN UNDERGROUND PIPING.                                  |                                       |                                |                   |
| RESPONSE ACTION : COMPANY IS REPAIRING LINE. TRYING TO COVER-UP.                                          |                                       |                                |                   |
| 02188JW1110                                                                                               | TELEDYNE NEOSHO INC.                  | #2 FUEL OIL (18000 gallons)    | ABOVE GROUND TANK |
| 02/18/88                                                                                                  | 3551 DONIPHAN DR/TELEDYNE NEOS        |                                |                   |
| 1110 HRS.                                                                                                 | NEOSHO, MO (NEWTON)                   |                                | CREEK             |
| NATURE OF INCIDENT : ABOVE GRND TANK LEAKED TO CONTAINMENT AREA THEN -100 G LEAKED TO CREEK               |                                       |                                |                   |
| RESPONSE ACTION : SORBENT IN CREEK AND CONTAINMENT AREA BEING PUMPED OUT                                  |                                       |                                |                   |
| W 1530                                                                                                    | PARKER OIL CO.                        | GASOLINE (3000 gallons)        | ABOVE GROUND TANK |
| /91                                                                                                       | VEE WILLYS' GAS STATION, RR 1 BOX 301 |                                | EQUIPMENT FAILURE |
| 1530 HRS.                                                                                                 | POPLAR BLUFF, MO (BUTLER)             |                                |                   |
| NATURE OF INCIDENT : GAS STATION / LEAKING ABOVE GROUND STORAGE TANK.                                     |                                       |                                |                   |
| RESPONSE ACTION : THE LEAKING TANK HAS BEEN REMOVED.                                                      |                                       |                                |                   |
| 092488N2320                                                                                               | PHILLIPS 66                           | GASOLINE (2500 gallons)        | ABOVE GROUND TANK |
| 09/24/88                                                                                                  | HWY 160 & HWY AA                      |                                |                   |
| 2320 HRS.                                                                                                 | SPRINGFIELD, MO (CHRISTIAN)           |                                | DITCH             |
| NATURE OF INCIDENT : 4" HOLE IN ABOVEGROUND TANK                                                          |                                       |                                |                   |
| RESPONSE ACTION : SPRINGFIELD FIRE DEPT ON SCENE. SANDBAGGING THE DITCH.                                  |                                       |                                |                   |
| 06302CAB1220                                                                                              | SOUTH COUNTY TECH SCHOOL DIST         | DIESEL (20000 gallons)         | ABOVE GROUND TANK |
| 06/30/92                                                                                                  | 9268 ROTT ROAD                        |                                | EQUIPMENT FAILURE |
| 1220 HRS.                                                                                                 | SUNSET HILLS, MO (ST. LOUIS)          |                                |                   |
| NATURE OF INCIDENT : DIESEL TANK RUPTURED / TANK RUSTED OUT.                                              |                                       |                                |                   |
| RESPONSE ACTION : SCHOOL DISTRICT HIRED CONTRACTOR TO CLEANUP SPILL. SPRING & LAKE STILL AFFECTED BY OIL. |                                       |                                |                   |

REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PI

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| CASE NUMBER                                                                               | RESPONSIBLE PARTY                     | MATERIAL (quantity)                   | SOURCE                  |
|-------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|-------------------------|
| RPT-DATE                                                                                  | INCIDENT LOCATION                     |                                       | CAUSE                   |
| RPT-TIME                                                                                  | CITY, ST., (CNTY)                     |                                       | WATERWAY AFFECTED       |
| 12239K 1815                                                                               | UNION PACIFIC R.R.                    | DIESEL FUEL (2300 gallons)            | RAILWAY                 |
| 12/23/89                                                                                  | MP-36.5, MISSISSIPPI LINE PLANT       |                                       | TRANSPORTATION ACCIDENT |
| 1815 HRS.                                                                                 | , MO (ST. GENEVIEVE)                  |                                       | GROUND WATER            |
| NATURE OF INCIDENT : LOCOMOTIVE MP-2174 FUEL TANK.                                        |                                       |                                       |                         |
| RESPONSE ACTION :                                                                         |                                       |                                       |                         |
| 03063K 1625                                                                               | BURLINGTON NORTHERN                   | DIESEL OIL (4000 gallons)             | RAILWAY                 |
| 03/06/93                                                                                  | RAIL/HIGHWAY CROSSING RR MILEPOST 134 |                                       | TRANSPORTATION ACCIDENT |
| 1717 HRS.                                                                                 | CAPE GIRARDEAU, MO (CAPE GIRARDEAU)   |                                       |                         |
| NATURE OF INCIDENT : DERAILMENT - FUEL IN 2 LOCOMOTIVE TANKS.                             |                                       |                                       |                         |
| RESPONSE ACTION : NOTIFIED MONR/DEAN MARTIN, THEY WILL HAVE PERSON RESPOND ON SCENE.      |                                       |                                       |                         |
| 04122K 1605                                                                               | NORFOLK SOUTHERN RAILROAD             | OTHER OIL (PETROLEUM) (23000 gallons) | RAILWAY                 |
| 04/12/92                                                                                  | MILEPOST 59.6                         |                                       | TRANSPORTATION ACCIDENT |
| 1836 HRS.                                                                                 | FERGUSON, MO (ST. LOUIS)              |                                       |                         |
| NATURE OF INCIDENT : DERAILMENT / TANK CAR IS LEAKING.                                    |                                       |                                       |                         |
| RESPONSE ACTION : RR IS ON-SITE, MONR TO SEND OBSERVER CHECKED WITH TEETER AT 1802 HOURS. |                                       |                                       |                         |
| 09109K 1910                                                                               | UNION PACIFIC RR                      | DIESEL FUEL (2200 gallons)            | RAILWAY                 |
| 09/10/89                                                                                  | UNION PACIFIC ST. JOSEPH YARD         |                                       |                         |
| 1940 HRS.                                                                                 | ST JOSEPH, MO (BUCHANAN)              |                                       | SOIL                    |
| NATURE OF INCIDENT :                                                                      |                                       |                                       |                         |
| RESPONSE ACTION : CLEANUP CREWS ARE ENROUTE                                               |                                       |                                       |                         |
| 02218JW0655                                                                               | UNION PACIFIC RR                      | DIESEL FUEL (3000 gallons)            | RAILWAY                 |
| 02/21/88                                                                                  | LESERANCE ST YARD                     |                                       |                         |
| 655 HRS.                                                                                  | ST LOUIS, MO (ST LOUIS)               |                                       | GROUND WATER            |
| NATURE OF INCIDENT : RAIL ENGINE UNIT UP#2175 DERAILED                                    |                                       |                                       |                         |
| RESPONSE ACTION : SOIL NEAR TRACKS, HAD SOAKED INTO GROUND NO ACTION TAKEN.               |                                       |                                       |                         |

EGION VII  
: 12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

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| CASE NUMBER                                                                                                                                            | RESPONSIBLE PARTY                        | MATERIAL (quantity)                      | SOURCE                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------------|-------------------------|
| RPT-DATE                                                                                                                                               | INCIDENT LOCATION                        |                                          | CAUSE                   |
| RPT-TIME                                                                                                                                               | CITY, ST., (CNTY)                        |                                          | WATERWAY AFFECTED       |
| 081618M 1635                                                                                                                                           | WALLACE OIL COMPANY                      | OIL: DIESEL OIL (7000 gallons)           | HIGHWAY                 |
| 08/16/91                                                                                                                                               | HWY 185 AT MERAMEC STATE PARK            |                                          | TRANSPORTATION ACCIDENT |
| 1635 HRS.                                                                                                                                              | , MO (FRANKLIN)                          |                                          |                         |
| NATURE OF INCIDENT : TANKER TRUCK / ACCIDENT.                                                                                                          |                                          |                                          |                         |
| RESPONSE ACTION : DELTA ENVIRONMENT ON SCENE.                                                                                                          |                                          |                                          |                         |
| 03093GH 1440                                                                                                                                           | ROBERTSON WILLIAMS                       | GASOLINE (8250 gallons)                  | HIGHWAY                 |
| 03/09/93                                                                                                                                               | BROADWAY EXTENSION (169) AND HWY 9 NORTH |                                          | TRANSPORTATION ACCIDENT |
| 1440 HRS.                                                                                                                                              | BOUND LANE                               |                                          |                         |
|                                                                                                                                                        | KANSAS CITY, MO (CLAY)                   |                                          |                         |
| NATURE OF INCIDENT : TRANSPORTATION ACCIDENT / APPROX. 1000 GAL REMAINED IN TANK.                                                                      |                                          |                                          |                         |
| RESPONSE ACTION : EPA/EP&R ONSCENE AT 1445 HOURS. KCMO HEALTH WILL WORK WITH TRUCKING INSURANCE CO TO HAVE TEST CONDUCT CLEANUP. NO WATERWAY AFFECTED. |                                          |                                          |                         |
| 04208GH1210                                                                                                                                            | UNKNOWN                                  | OILS, MISC : MOTOR (7100 gallons)        | HIGHWAY FIXED FACILITY  |
| 04/20/88                                                                                                                                               | E MI E. HWY 435 ON HWY 210               |                                          | DUMPING                 |
| 1210 HRS.                                                                                                                                              | KANSAS CITY, MO (CLAY)                   |                                          | DITCH                   |
| NATURE OF INCIDENT : WASTE OIL BEING DUMPED ON PROPERTY, INDUSTRIAL PARK.                                                                              |                                          |                                          |                         |
| ONSCENE ACTION : MOWR WILL HAVE INVESTIGATED.                                                                                                          |                                          |                                          |                         |
| 06039DES0230                                                                                                                                           | UNKNOWN                                  | OILS: GASOLINE (20000 gallons)           | HIGHWAY                 |
| 06/03/89                                                                                                                                               | UNKNOWN                                  |                                          | OTHER                   |
| 230 HRS.                                                                                                                                               | POLO, MO (CALDWELL)                      |                                          | UNKNOWN                 |
| NATURE OF INCIDENT : SPILLED FROM TANK INTO ROADSIDE DITCH.                                                                                            |                                          |                                          |                         |
| RESPONSE ACTION : TRIED TO CONTACT FIRE CHIEF BUT LINE WAS BUSY.                                                                                       |                                          |                                          |                         |
| 06309RC 1345                                                                                                                                           | KOCH SERVICES                            | ASPHALT EMULSION, E-A 300 (35000 pounds) | HIGHWAY                 |
| 06/30/89                                                                                                                                               | 2 MI. WEST OF TOWN ON HWY 50             |                                          | TRANSPORTATION ACCIDENT |
| 1345 HRS.                                                                                                                                              | WARRENSBURG, MO (JOHNSON)                |                                          | NONE                    |
| NATURE OF INCIDENT : SEMI TANKER OVERTURNED SPILLING CONTENTS.                                                                                         |                                          |                                          |                         |
| RESPONSE ACTION : SPRAYING SAND ON EMULSION. WILL TAKE SOLIDIFIED MATERIAL TO LANDFILL. RE-SOLD                                                        |                                          |                                          |                         |

REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAG

>>>>>>>> THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

| CASE NUMBER                                                                                | RESPONSIBLE PARTY                        | MATERIAL (quantity)              | SOURCE              |
|--------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------|---------------------|
| RPT-DATE                                                                                   | INCIDENT LOCATION                        |                                  | CAUSE               |
| RPT-TIME                                                                                   | CITY, ST., (CNTY)                        |                                  | WATERWAY AFFECTED   |
| 09161DES1318                                                                               | RIEDERS JIFFY MARKET                     | GASOLINE (5000 gallons)          | UNDERGROUND TANK    |
| 09/16/91                                                                                   | HW 248 AND SHEPARD OF HILLS EXPRESSWAY   |                                  | EQUIPMENT FAILURE   |
| 1318 HRS.                                                                                  | INTERSECTING<br>BRANSON, MO (TANEY)      |                                  |                     |
| NATURE OF INCIDENT : PIPING BETWEEN STORAGE TANK AND PUMP / LEAK IN PIPING UNDERGROUND.    |                                          |                                  |                     |
| RESPONSE ACTION : NOTIFIED MOWR.                                                           |                                          |                                  |                     |
| 10021GH 1455                                                                               | INDEPENDENCE WATER CONT                  | OIL, FUEL: NO. 2 (11000 gallons) | UNDERGROUND TANK    |
| 10/02/91                                                                                   | 9600 NORLEDGE                            |                                  | EQUIPMENT FAILURE   |
| 1545 HRS.                                                                                  | INDEPENDENCE, MO (JACKSON)               |                                  |                     |
| NATURE OF INCIDENT : UNDERGROUND TANK / VALVED INCORRECTLY.                                |                                          |                                  |                     |
| RESPONSE ACTION : SURFACE CLEANUP SOIL YET BE REMOVED                                      |                                          |                                  |                     |
| 03118DE1655                                                                                | PETRO TRUCK STOP                         | GASOLINE (3300 gallons)          | UNDERGROUND TANK    |
| 03/11/88                                                                                   | I-44 AND HWY. 43 SOUTH                   |                                  |                     |
| 1655 HRS.                                                                                  | JOPLIN, MO (NEWTON)                      |                                  | NONE                |
| NATURE OF INCIDENT : GASOLINE SPILLED TO RECOVERY WELL IN TANK PIT WHILE UNLOADING TO UST. |                                          |                                  |                     |
| RESPONSE ACTION : RP PUMPED GASOLINE & WATER FROM RECOVERY WELL. SRO WILL MONITOR CLEANUP. |                                          |                                  |                     |
| 12069M 2030                                                                                | KEEBLER COMPANY                          | DIESEL (2300 gallons)            | UNDERGROUND TANK    |
| 12/06/89                                                                                   | 1301 N. CORRINGTON, I-435 & FRONT STREET |                                  | OTHER               |
| 2030 HRS.                                                                                  | KANSAS CITY, MO (JACKSON)                |                                  | NONE                |
| NATURE OF INCIDENT : UNDERGROUND TANK. DUG UP, AT LEAST DOING SOME EXCAVATION.             |                                          |                                  |                     |
| RESPONSE ACTION :                                                                          |                                          |                                  |                     |
| 12299GH 1730                                                                               | PEVELY DAIRY                             | DIESEL FUEL (5000 gallons)       | UNDERGROUND TANK    |
| 12/29/89                                                                                   | 1001 S. GRAND                            |                                  | EQUIPMENT FAILURE   |
| 1730 HRS.                                                                                  | ST. LOUIS, MO (ST. LOUIS)                |                                  | CITY SANITARY SEWER |
| NATURE OF INCIDENT : 17,000 GALLON UNDERGROUND STORAGE TANK.                               |                                          |                                  |                     |
| RESPONSE ACTION : MATERIAL ON FLOOR PUMPED TO DRUMS. MATERIAL IN SEWER NOT RECOVERED.      |                                          |                                  |                     |

F DN VII  
D. 2/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE: 2

>>>>>>>> THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

| CASE NUMBER                                                                                | RESPONSIBLE PARTY                     | MATERIAL (quantity)             | SOURCE                 |
|--------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|------------------------|
| RPT-DATE                                                                                   | INCIDENT LOCATION                     |                                 | CAUSE                  |
| RPT-TIME                                                                                   | CITY, ST., (CNTY)                     |                                 | WATERWAY AFFECTED      |
| 12248K2110                                                                                 | SHELL OIL                             | CRUDE OIL (42000 gallons)       | PIPELINE               |
| 12/24/88                                                                                   | 5 MI. EAST VIENNA, MO                 |                                 |                        |
| 0 HRS.                                                                                     | VIENNA, MO (MARIES)                   |                                 | RIVER                  |
| NATURE OF INCIDENT : 22 FT PIPELINE BROKE, CAUSE UNKNOWN                                   |                                       |                                 |                        |
| RESPONSE ACTION : REIDEL ON SCENE. RECOVERING OIL BY VAC TRUCK. SHELL TO CALL STATE.       |                                       |                                 |                        |
| 12023TJC0115                                                                               | CONOCO PIPELINE                       | UNLEADED GASOLINE (200 barrels) | PIPELINE               |
| 12/02/93                                                                                   | T44N, R1W, SEC25 NE1/4 US SURVEY 1925 |                                 | UNKNOWN                |
| 215 HRS.                                                                                   | WASHINGTON, MO (FRANKLIN)             |                                 | DUBOIS CREEK TO MO RIV |
| NATURE OF INCIDENT : A 10" PIPELINE, WOOD RIVER PIPELINE / REL. DUE TO UNKNOWN CAUSE.      |                                       |                                 |                        |
| RESPONSE ACTION : LEPC & FD ONSCENE, NURSING HOME AND MOTEL EVACUATED, HAY BAILS DEPLOYED. |                                       |                                 |                        |
| BOOMS ARE/WILL BE DEPLOYED, LEAK HAS BEEN SECURED.                                         |                                       |                                 |                        |



REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAF

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| CASE NUMBER                                                                                    | RESPONSIBLE PARTY                      | MATERIAL (quantity)                            | SOURCE                     |
|------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------|----------------------------|
| RPT-DATE                                                                                       | INCIDENT LOCATION                      |                                                | CAUSE                      |
| RPT-TIME                                                                                       | CITY, ST., (CNTY)                      |                                                | WATERWAY AFFECTED          |
| 12218RR1345                                                                                    | SHELL OIL COMPANY                      | GASOLINE (9000 gallons)                        | FIXED FACILITY             |
| 12/21/88                                                                                       | SHELL STA., 11201 OLD ST. CHARLES      |                                                |                            |
| 0 HRS.                                                                                         | BRIDGETON, MO (ST. LOUIS)              |                                                | NONE                       |
| NATURE OF INCIDENT : FIBERGLAS HAS A HOLE IN IT.                                               |                                        |                                                |                            |
| RESPONSE ACTION : WORKING ON CLEANUP, INSTALLING RECOVERY SYSTEMS.                             |                                        |                                                |                            |
| 04208GH1210                                                                                    | UNKNOWN                                | OILS, MISC : MOTOR (7100 gallons)              | HIGHWAY FIXED FACILITY     |
| 04/20/88                                                                                       | E MI E. HWY 435 ON HWY 210             |                                                | DUMPING                    |
| 1210 HRS.                                                                                      | KANSAS CITY, MO (CLAY)                 |                                                | DITCH                      |
| NATURE OF INCIDENT : WASTE OIL BEING DUMPED ON PROPERTY, INDUSTRIAL PARK.                      |                                        |                                                |                            |
| RESPONSE ACTION : MONR WILL HAVE INVESTIGATED.                                                 |                                        |                                                |                            |
| 01118MR1400                                                                                    | SULLIVAN ASPHALT                       | OTHER OIL (10000 gallons)                      | FIXED FACILITY             |
| 01/20/88                                                                                       | PACIFIC                                |                                                | EQUIPMENT FAILURE          |
| 1030 HRS.                                                                                      | PACIFIC, MO (FRANKLIN)                 |                                                | BRUSH CRK TO MERAMEC RIVER |
| NATURE OF INCIDENT : LEAKING FUEL OIL TANK                                                     |                                        |                                                |                            |
| RESPONSE ACTION : CO DID SOME RECOVERY FROM UNDER ICE                                          |                                        |                                                |                            |
| 04103MAC0900                                                                                   | SCRIVENER OIL CO                       | GASOLINE: AUTOMOTIVE 4.23G PB/G (6000 gallons) | FIXED FACILITY             |
| 04/10/93                                                                                       | MARSHALL'S STORE HWY 60, 10 MILES E.   |                                                | OPERATIONAL ERROR          |
| 940 HRS.                                                                                       | SPRINGFIELD                            |                                                | MONITORING WELL            |
|                                                                                                | RODGERSVILLE, MO (GREENE)              |                                                |                            |
| NATURE OF INCIDENT : GAS BY MISTAKE PUMPED INTO MONITORING WELL.                               |                                        |                                                |                            |
| RESPONSE ACTION : DISCHARGER STARTED PUMPING AT 0800 HOURS ON/OFF APPROX. 1500 GALLONS PUMPED. |                                        |                                                |                            |
| 09261WR 0925                                                                                   | SPECIAL SCHOOL DISTRICT                | GASOLINE (20000 gallons)                       | FIXED FACILITY             |
| 09/26/91                                                                                       | ON OTHER SIDE OF HIGHWAY FROM CALLER'S |                                                | UNKNOWN                    |
| 25 HRS.                                                                                        | HOUSE                                  |                                                |                            |
|                                                                                                | ST. LOUIS, MO (ST. LOUIS)              |                                                |                            |
| NATURE OF INCIDENT : RELEASE FROM SCHOOL PROPERTY MIGRATED TO CALLERS' PROPERTY.               |                                        |                                                |                            |
| RESPONSE ACTION : NONE, MONR INVESTIGATED, COLLECTING SAMPLES, BUT NO ACTION WAS TAKEN.        |                                        |                                                |                            |

ION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

| CASE NUMBER                                                                                                                                                                                    | RESPONSIBLE PARTY                                                                                                  | MATERIAL (quantity)               | SOURCE                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------|
| RPT-DATE                                                                                                                                                                                       | INCIDENT LOCATION                                                                                                  |                                   | CAUSE                                                         |
| RPT-TIME                                                                                                                                                                                       | CITY, ST., (CNTY)                                                                                                  |                                   | WATERWAY AFFECTED                                             |
| 07072GH 2105<br>07/07/92<br>2131 HRS.                                                                                                                                                          | BURLINGTON NORTHERN R/R<br>BURLINGTON NORTHERN RR - 1/2 MILE WEST<br>OF CEDAR BLUFFS<br>CEDAR BLUFFS, KS (DECATUR) | OIL, FUEL: NO. 2-D (2300 gallons) | RAILWAY<br>TRANSPORTATION ACCIDENT<br>INTERMITTENT BEAVER CRI |
| NATURE OF INCIDENT : FUEL TANK / UNNAMED ROAD CROSSING - TRACTOR ON LINE.<br>RESPONSE ACTION : IN PROCESS TO INITIATE RESPONSE.                                                                |                                                                                                                    |                                   |                                                               |
| 07093MAC2300<br>07/09/93<br>2347 HRS.                                                                                                                                                          | SOUTHERN PACIFIC LINES<br>KANSAS CITY YARD<br>KANSAS CITY, KS (WYANDOTTE)                                          | OIL: DIESEL (3600 gallons)        | RAILWAY<br>TRANSPORTATION ACCIDENT                            |
| NATURE OF INCIDENT : LOCOMOTIVE PUNCTURED FUEL LINE / PUNCTURED FUEL LINE.<br>RESPONSE ACTION : HAZMAT OFFICER AND WATER COMMISSION NOTIFIED. DIKE WILL BE CONSTRUCTED TO<br>CONTAIN MATERIAL. |                                                                                                                    |                                   |                                                               |
| 02140JW 1835<br>02/14/90<br>1839 HRS.                                                                                                                                                          | UNION PACIFIC R.R.<br>RAIL YARD<br>MARYSVILLE, KS (MARSHALL)                                                       | OIL: DIESEL (2500 gallons)        | RAILWAY<br>EQUIPMENT FAILURE<br>CONCRETE CONTAINMENT<br>AREA. |
| E OF INCIDENT : RAIL LOCOMOTIVE<br>ISE ACTION : PUMPING FUEL OUT OF PIT.                                                                                                                       |                                                                                                                    |                                   |                                                               |
| 05190PED1830<br>05/19/90<br>1919 HRS.                                                                                                                                                          | FARMLAND INDUSTRIES INC.<br>FARMLAND INDUSTRIES INC. NORTH HWY 183<br>PHILLIPSBURG, KS (PHILLIPS)                  | GAS OIL (100 barrels)             | RAILWAY<br>GROUND                                             |
| NATURE OF INCIDENT :<br>RESPONSE ACTION : DIKED OFF SPILL AREA. COMPANY CREWS WILL BE PERFORMING THE CLEANUPS.                                                                                 |                                                                                                                    |                                   |                                                               |
| 03093JW 0001<br>03/09/93<br>44 HRS.                                                                                                                                                            | UNION PACIFIC RAILROAD<br>WHITE LAW, KS (UNKNOWN)                                                                  | OIL: DIESEL (3500 gallons)        | RAILWAY<br>TRANSPORTATION ACCIDENT                            |
| NATURE OF INCIDENT : LOCOMOTIVE FUEL TANK. TANK RUPTURED DURING DERAILMENT. TRAIN #LKW53-08.<br>RESPONSE ACTION : A BACKHOE WAS USED TO CONSTRUCT A BERM.                                      |                                                                                                                    |                                   |                                                               |

REGION VII  
2: 12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

P1

>>>>>>>> THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

| CASE NUMBER                                                                                                                                     | RESPONSIBLE PARTY                      | MATERIAL (quantity)                           | SOURCE             |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------|--------------------|
| RPT-DATE                                                                                                                                        | INCIDENT LOCATION                      |                                               | CAUSE              |
| RPT-TIME                                                                                                                                        | CITY, ST., (CNTY)                      |                                               | WATERWAY AFFECTED  |
| 01062JW 2150                                                                                                                                    | AMOCO PIPELINE                         | OIL: CRUDE (100 barrels)                      | PIPELINE           |
| 01/06/92                                                                                                                                        | 2 MILES SOUTH OF FREEMAN, NW 1/4, SEC  |                                               | EQUIPMENT FAILURE  |
| 2241 HRS.                                                                                                                                       | 24, T 44N, R 33W                       |                                               | DITCH > PONY CREEK |
|                                                                                                                                                 | FREEMAN, MO (CASS)                     |                                               |                    |
| NATURE OF INCIDENT : 12" CRUDE OIL PIPELINE / CORROSION LEAK.                                                                                   |                                        |                                               |                    |
| RESPONSE ACTION : EPA, EPA/TAT, ESI ONSCENE. ESTIMATE 3 DAYS TO PICK UP FREE PRODUCT, SOIL EXCAVATION TO BEGIN AFTER THAT. LEAK MOSTLY STOPPED. |                                        |                                               |                    |
| 07051H 0940                                                                                                                                     | MARATHON PIPELINE CO                   | OIL: CRUDE (200 barrels)                      | PIPELINE           |
| 07/05/91                                                                                                                                        | ON HWY 24, 3 MILES WEST OF SALISBURY   |                                               | UNKNOWN            |
| 940 HRS.                                                                                                                                        | SALISBURY, MO (CHARITON)               |                                               |                    |
| NATURE OF INCIDENT : RELEASE FROM CRUDE OIL PIPELINE                                                                                            |                                        |                                               |                    |
| RESPONSE ACTION : PIPELINE SHUTDOWN. PICKED UP BY VACUUM TRUCK. REMAINING SOIL EXCAVATED.                                                       |                                        |                                               |                    |
| 01102DES0120                                                                                                                                    | PLATTE PIPELINE                        | OIL: CRUDE (1000 barrels)                     | PIPELINE           |
| 01/10/92                                                                                                                                        | SEC 13, R17W, T53N ( 1 MILE E. OF      |                                               | UNKNOWN            |
| 335 HRS.                                                                                                                                        | SALISBURY STATION)                     |                                               | TRIBUTARY OF THE   |
|                                                                                                                                                 | SALISBURY, MO (CHARITON)               |                                               | CHARITON RIV.      |
| NATURE OF INCIDENT : 20" TRANSPORTATION PIPELINE / EXPERIENCED LOSS OF PRESSURE IN THE LINE.                                                    |                                        |                                               |                    |
| RESPONSE ACTION : MONR ONSCENE. INSTALLED DIKE IN DRAINAGE DITCH. CLEANUP CONTRACTOR ENROUTE.                                                   |                                        |                                               |                    |
| 11080M 0115                                                                                                                                     | WILLIAMS PIPELINE CO                   | GASOLINE: AUTOMOTIVE 4.23G PB/G (200 barrels) | PIPELINE           |
| 11/08/90                                                                                                                                        |                                        |                                               |                    |
| 115 HRS.                                                                                                                                        | SHELDON, MO (VERNON)                   |                                               |                    |
| NATURE OF INCIDENT :                                                                                                                            |                                        |                                               |                    |
| RESPONSE ACTION : USING A BACKHOE TO DIKE OFF THE SPILL. CLEANUP ACTION WILL BE TAKEN.                                                          |                                        |                                               |                    |
| 062408M 1500                                                                                                                                    | AMOCO PIPELINE CO.                     | GASOLINE: AUTOMOTIVE 4.23G PB/G (100 barrels) | PIPELINE           |
| 06/24/90                                                                                                                                        | NORTH OF ST. CHARLES MO. NEAR INTERSEC |                                               |                    |
| 1813 HRS.                                                                                                                                       | ST. CHARLES, MO (ST. CHARLES)          |                                               | LAND               |
| NATURE OF INCIDENT :                                                                                                                            |                                        |                                               |                    |
| RESPONSE ACTION : CONTAINED WITHIN AN EARTHEN DAM AND RECOVERING WITH VAC TRUCKS                                                                |                                        |                                               |                    |
| 052700ES1320                                                                                                                                    | KOCH PIPELINE                          | OIL: CRUDE (1000 barrels)                     | PIPELINE           |
| 05/27/90                                                                                                                                        | PIPELINE MILEPOST 33 OFF HWY 79        |                                               |                    |
| 1414 HRS.                                                                                                                                       | ST. CHARLES, MO (ST. CHARLES)          |                                               | SOIL               |
| NATURE OF INCIDENT :                                                                                                                            |                                        |                                               |                    |
| RESPONSE ACTION : NONE.                                                                                                                         |                                        |                                               |                    |
| 10268MTR0855                                                                                                                                    | WILLIAMS PIPELINE                      | X-GRADE #2 FUEL OIL (233 barrels)             | PIPELINE           |
| 10/26/88                                                                                                                                        |                                        |                                               |                    |
| 855 HRS.                                                                                                                                        | ST. CHARLES, MO (ST. CHARLES)          |                                               | NONE               |
| NATURE OF INCIDENT : CONTRACTOR LAYING H2O LINE BREACHED 8" OIL PIPELINE                                                                        |                                        |                                               |                    |
| RESPONSE ACTION : MONR IS MONITORING CLEANUP. 128 OF 233 BARRELS RECOVERED. MINIMAL SOIL REMOVAL                                                |                                        |                                               |                    |

GICM VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE: 2

>>>>>>>> THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

| CASE NUMBER                                                              | RESPONSIBLE PARTY                         | MATERIAL (quantity)                        | SOURCE                          |
|--------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|---------------------------------|
| RPT-DATE                                                                 | INCIDENT LOCATION                         |                                            | CAUSE                           |
| RPT-TIME                                                                 | CITY, ST., (CITY)                         |                                            | WATERWAY AFFECTED               |
| 04200GH 1400                                                             | UNKNOWN                                   | CRUDE OIL (1000 gallons)                   | UNDERGROUND TANK                |
| 04/20/90                                                                 | LIC#03892/LEASE-MILLHEISLER 8 SEC, 4-26-5 |                                            | EQUIPMENT FAILURE               |
| 1400 HRS.                                                                | , KS (BUTLER)                             |                                            | WALNUT RIVER                    |
| NATURE OF INCIDENT : OIL PRODUCTION FACILITY                             |                                           |                                            |                                 |
| RESPONSE ACTION : NONE CLEANED UP. SIX SPILLS IN PAST NOT CLEANED UP.    |                                           |                                            |                                 |
| 01213H 0113                                                              | CUSTARD INSURANCE ADJ.                    | OIL, FUEL: NO. 1 (KEROSENE) (1000 gallons) | FIXED FACILITY UNDERGROUND TANK |
| 01/21/93                                                                 | ANDERSON CNTY COOP BETWEEN MILEPOST 106   |                                            | OPERATIONAL ERROR               |
| 156 HRS.                                                                 | AND 107 ON US HWY 169.                    |                                            |                                 |
|                                                                          | GREELEY, KS (ANDERSON)                    |                                            |                                 |
| NATURE OF INCIDENT : VALVE LEFT OPEN.                                    |                                           |                                            |                                 |
| RESPONSE ACTION : THE MATERIAL WAS RELEASED INTO SECONDARY CONTAINMENT.  |                                           |                                            |                                 |
| 03303H 0924                                                              | USAF-MCCONNELL AFB                        | OIL, FUEL: NO. 2 (1750 gallons)            | UNDERGROUND TANK                |
| 03/30/93                                                                 | BLDG 1190, MCCONNELL AFB                  |                                            | UNKNOWN                         |
| 1020 HRS.                                                                | MCCONNELL AFB, KS (SEDGWICK)              |                                            |                                 |
| NATURE OF INCIDENT : UNDERGROUND TANK LEAKED DUE TO UNKNOWN CAUSE.       |                                           |                                            |                                 |
| RESPONSE ACTION : NONE                                                   |                                           |                                            |                                 |
| 08/28/91                                                                 | FARMERS INSURANCE                         | DIESEL FUEL (800 gallons)                  | FIXED FACILITY UNDERGROUND TANK |
| 1220 HRS.                                                                | 11880 COLLEGE BLVD.                       |                                            | EQUIPMENT FAILURE               |
|                                                                          | OVERLAND PARK, KS (JOHNSON)               |                                            |                                 |
| NATURE OF INCIDENT : FUEL TANK FOR BACKUP GENERATOR / PUMP FAILURE.      |                                           |                                            |                                 |
| RESPONSE ACTION : EST HIRED TO WALK CREEK BANK AND CLEANUP RESIDUAL OIL. |                                           |                                            |                                 |
| 03253CAB1025                                                             | FARMLAND INDUSTRIES INC.                  | OIL: DIESEL (80 barrels)                   | FIXED FACILITY UNDERGROUND TANK |
| 03/25/93                                                                 | NORTH HWY 183                             |                                            | EQUIPMENT FAILURE               |
| 1021 HRS.                                                                | PHILLIPSBURG, KS (PHILLIPS)               |                                            |                                 |
| NATURE OF INCIDENT : 55000 BARREL TANK / LEAKING STORAGE TANK.           |                                           |                                            |                                 |
| RESPONSE ACTION : PUMPED MATERIAL TO OTHER TANK, EXCAVATED SOIL.         |                                           |                                            |                                 |
| 01098JR0830                                                              | STRICKER OIL CO.                          | BRINE FROM SW TANK (50 barrels)            | UNDERGROUND TANK                |
| 01/09/88                                                                 | 7-24-10                                   |                                            | NONE                            |
| 830 HRS.                                                                 | ZENITH, KS (RENO)                         |                                            |                                 |
| NATURE OF INCIDENT : SALT WATER TANK RAN OVER.                           |                                           |                                            |                                 |
| RESPONSE ACTION :                                                        |                                           |                                            |                                 |

REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PA

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|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------|-------------------|
| RPT-DATE                                                                                                                | INCIDENT LOCATION                 |                            | CAUSE             |
| RPT-TIME                                                                                                                | CITY, ST., (CNTY)                 |                            | WATERWAY AFFECTED |
| 03233TJC1215                                                                                                            | FOUR WAY PRODUCTION               | CRUDE OIL (120 barrels)    | ABOVE GROUND TANK |
| 03/23/93                                                                                                                | 5 MILES SOUTH OF CITY             |                            | EQUIPMENT FAILURE |
| 1215 HRS.                                                                                                               | BOGUE, KS (GRAHAM)                |                            | FARM POND         |
| NATURE OF INCIDENT : CRUDE OIL STORAGE TANK / LEAK REACHED A FARM POND 1/5 MILE FR TANK SITE.                           |                                   |                            |                   |
| RESPONSE ACTION : KCC HAYS OFFICE CONTACTED AND WILL INVESTIGATE.                                                       |                                   |                            |                   |
| 02221CAB0815                                                                                                            | GABBERT-JONES INC.                | OIL: DIESEL (1400 gallons) | ABOVE GROUND TANK |
| 02/22/91                                                                                                                | EAST HWY 56                       |                            |                   |
| 815 HRS.                                                                                                                | GREAT BEND, KS (BARTON)           |                            |                   |
| NATURE OF INCIDENT : ABOVE GROUND TANK.                                                                                 |                                   |                            |                   |
| RESPONSE ACTION : NONE                                                                                                  |                                   |                            |                   |
| 10053JFK1600                                                                                                            | SINCLAIR PIPELINE COMPANY         | DIESEL NO 1 (1200 gallons) | ABOVE GROUND TANK |
| 10/05/93                                                                                                                | 3401 FAIRBANKS                    |                            | EQUIPMENT FAILURE |
| 1600 HRS.                                                                                                               | KANSAS CITY, KS (WYANDOTTE)       |                            |                   |
| NATURE OF INCIDENT : MANWAY GASKET RUPTURED, CONTAINED WITHIN DIKE. GASKET RUPTURED.                                    |                                   |                            |                   |
| RESPONSE ACTION : CLEANED UP SPILL - INDIKE USING WATER TO FLOAT REMAINING DIESEL - IN HOUSE<br>SINCLAIR RESPONSE CREW. |                                   |                            |                   |
| 07232DW 1315                                                                                                            | KENNY WINN                        | OIL (50 barrels)           | ABOVE GROUND TANK |
| 07/23/92                                                                                                                | NEOSHO RIVER, JUST NORTH OF LEROY |                            | EQUIPMENT FAILURE |
| 1315 HRS.                                                                                                               | LE ROY, KS (COFFEY)               |                            |                   |
| NATURE OF INCIDENT : PRIVATE OIL SUPPLIER                                                                               |                                   |                            |                   |
| RESPONSE ACTION : LEAD LINE BREAK WHICH SIPHONED OIL OUT OF TANK.<br>KANSAS CORP COMMISSION HAS RESPONDERS ON LOCATION. |                                   |                            |                   |
| 01241BM 1730                                                                                                            | COASTAL DERBY REFINING CO.        | GASOLINE (75 barrels)      | ABOVE GROUND TANK |
| 01/24/91                                                                                                                | 1100 E. 21ST ST.                  |                            | EQUIPMENT FAILURE |
| 1730 HRS.                                                                                                               | WICHITA, KS (SEDGWICK)            |                            | NONE              |
| NATURE OF INCIDENT : 27,100 BARREL ABOVE GROUND STORAGE TANK / ROOF DRAIN LEAKED.                                       |                                   |                            |                   |
| RESPONSE ACTION : VACUUM TRUCKS RECOVERED SPILLED MATERIAL. SPILL CONTAINED IN CONTAINMENT DIKE.                        |                                   |                            |                   |
| 04273DW 1045                                                                                                            | BY30 DRILLING INC.                | CRUDE OIL (50 barrels)     | ABOVE GROUND TANK |
| 04/27/93                                                                                                                | 25662 LIMIT ROAD                  |                            | EQUIPMENT FAILURE |
| 1045 HRS.                                                                                                               | WINCHESTER, KS (LEAVENWORTH)      |                            | STRANGER CREEK    |
| NATURE OF INCIDENT : OIL-WATER SEPARATOR TANK / OVERFLOWING OF TANK.                                                    |                                   |                            |                   |
| RESPONSE ACTION : UNKNOWN.                                                                                              |                                   |                            |                   |

REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

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| CASE NUMBER                                                                                                          | RESPONSIBLE PARTY          | MATERIAL (quantity)                  | SOURCE            |
|----------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------|-------------------|
| RPT-DATE                                                                                                             | INCIDENT LOCATION          |                                      | CAUSE             |
| RPT-TIME                                                                                                             | CITY, ST., (CNTY)          |                                      | WATERWAY AFFECTED |
| 01128GT1631                                                                                                          | LAW PRODUCTION CO.         | OIL & BRINE (400 barrels)            | FIXED FACILITY    |
| 01/12/88                                                                                                             | NE & SE /34-16-10/         |                                      |                   |
| 1631 HRS.                                                                                                            | , KS (ELLSWORTH)           |                                      | NONE              |
| NATURE OF INCIDENT : APPARENT TUBING BREAK WHICH ALLOWED MOVEMENT AT WELL HEAD WHICH IN TURN BRK                     |                            |                                      |                   |
| RESPONSE ACTION : DITCH WAS DAMMED AND WATER WAS PICKED UP BY TRUCK. WATER FROZE BEFORE PICKUP                       |                            |                                      |                   |
| 01011GH 1930                                                                                                         | SAM MAZE PETROLEUM         | OIL: CRUDE (40000 gallons)           | FIXED FACILITY    |
| 01/01/91                                                                                                             | CHALK RD                   |                                      |                   |
| 1930 HRS.                                                                                                            | ALMA, KS (WARSAWSEE)       |                                      |                   |
| NATURE OF INCIDENT :                                                                                                 |                            |                                      |                   |
| RESPONSE ACTION : FIRE DEPT ON SCENE FIGHTING THE FIRE.                                                              |                            |                                      |                   |
| 11093OW 1200                                                                                                         | TOTAL PETROLEUM            | OIL: CRUDE (800 barrels)             | FIXED FACILITY    |
| 11/09/93                                                                                                             | 1400 SOUTH M ST            |                                      | EQUIPMENT FAILURE |
| 1266 HRS.                                                                                                            | ARKANSAS CITY, KS (COWLEY) |                                      |                   |
| NATURE OF INCIDENT : OVERFLOWED DUE TO A DEVEL GAUGE MALFUNCTION.                                                    |                            |                                      |                   |
| RESPONSE ACTION : OIL WAS CONTAINED IN CONTAINMENT DIKE. VAC TRUCKS USED TO PUMP OUT, SOME SPRAY FOAM USED ON SPILL. |                            |                                      |                   |
| 18MU1520                                                                                                             | COMMONWEALTH PET CORP      | SALTWATER (475 barrels)              | FIXED FACILITY    |
| 06/21/88                                                                                                             | C/30-28-03W/               |                                      |                   |
| 1520 HRS.                                                                                                            | BURTON, KS (HARVEY)        |                                      | NONE              |
| NATURE OF INCIDENT : SHAFT COUPLING BETWEEN TRANSFER PUMP AND ELECTRIC MOTOR BROKE.                                  |                            |                                      |                   |
| RESPONSE ACTION : VAC TRUCKS PICKED UP WHAT HAD NOT SOAKED INTO GROUND.                                              |                            |                                      |                   |
| 02048JLR1000                                                                                                         | EXCALIBUR OIL CO.          | SALT WATER FROM SYSTEM (300 barrels) | FIXED FACILITY    |
| 02/04/88                                                                                                             | 15-24-4                    |                                      |                   |
| 0 HRS.                                                                                                               | BURTON, KS (RENO)          |                                      | NONE              |
| NATURE OF INCIDENT : OBSTRUCTION IN THE FLOAT VALVE. WOULD NOT LET IT OPEN.                                          |                            |                                      |                   |
| RESPONSE ACTION : MOST OF SPILL WAS HELD IN DYKE. ABOUT 50-75 BARRELS WENT INTO WHEAT FIELD.                         |                            |                                      |                   |

REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE

>>>>>>>> THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

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|------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------|--------------------------------------|
| 05273JBD1120                                                                                               | WILLIAMS PIPELINE                       | PETROLM SLUDGE FR TANK CLEANING (90 barrels)    | HIGHWAY                              |
| 05/27/93                                                                                                   | 1309 SUNSET ROAD                        |                                                 | EQUIPMENT FAILURE                    |
| 1215 HRS.                                                                                                  | EL DORADO, KS (BUTLER)                  |                                                 |                                      |
| NATURE OF INCIDENT : TRANSPORT TANKER / BLOCKS UNDER DOLLY GAVE WAY CAUSING TANKER TO OVERTURN.            |                                         |                                                 |                                      |
| RESPONSE ACTION : MATERIAL IS BEING RECOVERED WITH VACUUM EQUIPMENT / CONTAMINATED SOIL WILL BE EXCAVATED. |                                         |                                                 |                                      |
| 07108H2100                                                                                                 | BECKER CORPORATION                      | GASOLINE (8000 gallons)                         | HIGHWAY                              |
| 07/10/88                                                                                                   | 3RD & MINNESOTA                         |                                                 | TRANSPORTATION ACCIDENT              |
| 2100 HRS.                                                                                                  | KANSAS CITY, KS (WYANDOTTE)             |                                                 | KAW RIVER                            |
| NATURE OF INCIDENT : MOTOR VEHICLE OVERTURNED                                                              |                                         |                                                 |                                      |
| RESPONSE ACTION : CONTROL FIRE & FLUSH TO SEWER                                                            |                                         |                                                 |                                      |
| 05080WR 0900                                                                                               | HAMPEL OIL DISTRIBUTORS                 | OIL: DIESEL (4000 gallons)                      | HIGHWAY                              |
| 05/08/90                                                                                                   | KANSAS HWY 177, 1/2 MILE NORTH OF MATFI |                                                 |                                      |
| 946 HRS.                                                                                                   | MATFIELD GREEN, KS (CHASE)              |                                                 | SOIL                                 |
| NATURE OF INCIDENT : TANK TRUCK                                                                            |                                         |                                                 |                                      |
| RESPONSE ACTION : KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT WILL HANDLE CLEANUP.                         |                                         |                                                 |                                      |
| 11188DR0230                                                                                                | WHEELER TRANSPORT SERVICE               | VAC-10 ASPHALT (35000 pounds)                   | HIGHWAY                              |
| 11/18/88                                                                                                   | NE/7-22-8E                              |                                                 |                                      |
| 230 HRS.                                                                                                   | MATFIELD GREEN, KS (CHASE)              |                                                 | DITCH                                |
| NATURE OF INCIDENT : TRAILER OVERTURNED ON HWY 177 AT THE SOUTH END OFF MATFIELD GREEN.                    |                                         |                                                 |                                      |
| RESPONSE ACTION : BACKHOES & LOADERS WERE USED TO PICK UP THE TAR. ANY AFFECTED SOIL WAS REMOVED.          |                                         |                                                 |                                      |
| 02053K 1555                                                                                                | BECKER CORP                             | GASOLINE: AUTOMOTIVE (4.23G PB/G (2900 gallons) | HIGHWAY                              |
| 02/05/93                                                                                                   | PAWNEY AVE AND 135 OVERPASS             |                                                 |                                      |
| 1843 HRS.                                                                                                  | WICHITA, KS (SEDGWICK)                  |                                                 | DITCH TO WICHITA STP.                |
| NATURE OF INCIDENT : TANKER IN DITCH.                                                                      |                                         |                                                 |                                      |
| RESPONSE ACTION : BOOMS DEPLOYED ON GROUND, WICHITA FD HAZ MAT TEAM ON SCENE.                              |                                         |                                                 |                                      |

ION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

>>>>>>>> THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

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|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------|-------------------------|
| RPT-DATE                                                                                                                                        | INCIDENT LOCATION                       |                                      | CAUSE                   |
| RPT-TIME                                                                                                                                        | CITY, ST., (CNTY)                       |                                      | WATERWAY AFFECTED       |
| 01280H 1215                                                                                                                                     | BURLINGTON NORTHERN RR                  | #2 FUEL OIL (2000 gallons)           | RAILWAY                 |
| 01/28/90                                                                                                                                        | MP 238-239                              |                                      |                         |
| 1259 HRS.                                                                                                                                       | , IA (HENRY)                            |                                      | BALLST                  |
| NATURE OF INCIDENT :                                                                                                                            |                                         |                                      |                         |
| RESPONSE ACTION : NOTHING AT THIS TIME                                                                                                          |                                         |                                      |                         |
| 06028HOG1107                                                                                                                                    | CHICAGO NORTH WESTERN RR                | #2 DIESEL FUEL (4000 gallons)        | RAILWAY                 |
| 06/02/88                                                                                                                                        | CHICAGO NORTH WESTERN R.R. YARD         |                                      |                         |
| 0 HRS.                                                                                                                                          | BOONE, IA (BOONE)                       |                                      | NONE                    |
| NATURE OF INCIDENT : LOCOMOTIVE #6917 DERAILED & ROLLED FORWARD, FRONT TRUCKS CAME OFF                                                          |                                         |                                      |                         |
| RESPONSE ACTION : FUEL IS IN CONTAINMENT. R.R. TO PUMP MATERIAL UP. PROVIDE CONSULTANT NAMES.                                                   |                                         |                                      |                         |
| 06098BG1700                                                                                                                                     | C & M W RAILROAD                        | DIESEL FUEL (2500 gallons)           | RAILWAY                 |
| 06/09/88                                                                                                                                        | WEST SIDE OF TOWN                       |                                      |                         |
| 0 HRS.                                                                                                                                          | BRADFORD, IA (FRANKLIN)                 |                                      | NONE                    |
| NATURE OF INCIDENT : TRAIN DERAILED AFTER HITTING PICKUP. FUEL ON ONE ENGINE RUPTURED                                                           |                                         |                                      |                         |
| RESPONSE ACTION : DIG SUMP. PUMP RUPTTANK EMPT. BLOCK TILE INTAKES. CHECK STREAMS, REMOVE SOIL                                                  |                                         |                                      |                         |
| 0000/TJ 1417                                                                                                                                    | SOO LINE R.R.                           | LUBRICATION OIL (1500 gallons)       | RAILWAY                 |
| 02/22/89                                                                                                                                        | RAILROAD LINE FROM OTTUMWA TO DAVENPORT |                                      | UNKNOWN                 |
| 417 HRS.                                                                                                                                        | DAVENPORT, IA (MUSCATINE/LOUISA/HNY)    |                                      | NONE                    |
| NATURE OF INCIDENT : FLANGE ON THE BOTTOM OF TANK CAR LOOSENED ON THE WAY TO DAVENPORT.                                                         |                                         |                                      |                         |
| RESPONSE ACTION : OIL ABSORBANT PADS ARE BEING USED TO SOAK UP SPOTS OF PRODUCT.                                                                |                                         |                                      |                         |
| 07113DES2230                                                                                                                                    | SOO LINE RAILROAD                       | OIL: DIESEL (2000 gallons)           | RAILWAY                 |
| 07/11/93                                                                                                                                        | MILEPOST 75                             |                                      | TRANSPORTATION ACCIDENT |
| 2113 HRS.                                                                                                                                       | GUTTENBERG, IA (CLAYTON)                |                                      | MISSISSIPPI RIVER       |
| NATURE OF INCIDENT : TRAIN HIT MUD SLIDE & RUPTURED FUEL TANK / FLOOD RELATED.                                                                  |                                         |                                      |                         |
| RESPONSE ACTION : RR PERSONNEL RESPONDING TO THE SITE. MOST OF THE PRODUCT IS IN THE WATER IS UNRECOVERABLE. WILL REMOVE ANY CONTAMINATED SOIL. |                                         |                                      |                         |
| 02199DJA1049                                                                                                                                    | CHICAGO & N.WESTERN R.R.                | DIESEL FUEL (3000 gallons)           | RAILWAY                 |
| 02/19/89                                                                                                                                        | E. 6TH ST., DOWNTOWN                    |                                      | TRANSPORTATION ACCIDENT |
| 1049 HRS.                                                                                                                                       | LINEVILLE, IA (WAYNE)                   |                                      | STORM SEWER             |
| NATURE OF INCIDENT : TRAIN HIT CAR AT DOWNTOWN INTERSECTION. FUEL INTO R.O.W. DITCH & STORM SWR                                                 |                                         |                                      |                         |
| RESPONSE ACTION : STOP LEAK, DIKE UP RUNNING FUEL, PUMP UP, CHECK STORM SWR OUTFALL, EXCAVATE SOIL.                                             |                                         |                                      |                         |
| 06158DJA0942                                                                                                                                    | SIOUX LINE R.R.                         | DIESEL FUEL, LUBE OIL (3000 gallons) | RAILWAY                 |
| 06/15/88                                                                                                                                        | E. OF CITY NEAR SPOCK CAVE RD.          |                                      |                         |
| 0 HRS.                                                                                                                                          | MONONA, IA (CLAYTON)                    |                                      | CREEK                   |
| NATURE OF INCIDENT : 5 LOCOMOTIVES DERAILED WITH 5 GRAIN CARS IN IN BLOODY RUN CREEK                                                            |                                         |                                      |                         |
| RESPONSE ACTION : EVALUATE SITUATION, IMPLEMENT PROCEDURES TO STOP FLOW OF PRODUCT INTO CREEK.                                                  |                                         |                                      |                         |



REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

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|-----------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------|-------------------|
| RPT-DATE                                                                                      | INCIDENT LOCATION                      |                                | CAUSE             |
| RPT-TIME                                                                                      | CITY, ST., (CNTY)                      |                                | WATERWAY AFFECTED |
| 02229RK 1525                                                                                  | LOO LINE                               | LUBRICATION OIL (1500 gallons) | RAILWAY           |
| 02/22/89                                                                                      | FROM 8 MI. W. OF NAWANT TO THE RR YARD |                                | EQUIPMENT FAILURE |
| 1525 HRS.                                                                                     | NAWANT, IA (SCOTT)                     |                                | NONE              |
| NATURE OF INCIDENT : DEFECTIVE VALVE CAUSED LEAK OF PRODUCT OVER AN 8 MILES STRETCH OF TRACK. |                                        |                                |                   |
| RESPONSE ACTION : WILL INSPECT THE LENGTH OF TRACK FOR POOLED AREAS OR CONDUITS TO WATERWAYS. |                                        |                                |                   |

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|-----------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------|--------------------------|
| RPT-DATE                                                                                      | INCIDENT LOCATION                         |                              | CAUSE                    |
| RPT-TIME                                                                                      | CITY, ST., (CNTY)                         |                              | WATERWAY AFFECTED        |
| 07011PED0900                                                                                  | UNIVERSITY OF IOWA                        | AVIATION FUEL (3000 gallons) | UNDERGROUND TANK         |
| 07/01/91                                                                                      | 2-3 MLS N OF TOWN NEAR OAKDALE FAC HW 965 |                              | OPERATIONAL ERROR        |
| 900 HRS.                                                                                      | , IA ( )                                  |                              | CLEAR CREEK > IOWA RIVER |
| NATURE OF INCIDENT : UNDERGROUND FUEL TANK HELICOPTER PAD / RUPTURED                          |                                           |                              |                          |
| RESPONSE ACTION : NOTIFIED IDNR 7/3/91.                                                       |                                           |                              |                          |
| 01228JR0810                                                                                   | JOHN SCHULTZ CORNER STORE                 | GASOLINE (10000 gallons)     | UNDERGROUND TANK         |
| 01/22/88                                                                                      | 1-380 ACCESS RD, S EDGE OF TOWN           |                              |                          |
| 810 HRS.                                                                                      | CENTER POINT, IA (LINN)                   |                              | NONE                     |
| NATURE OF INCIDENT : LOOSE FITTING ON PUMP DISCHARGE                                          |                                           |                              |                          |
| RESPONSE ACTION : FIX LEAK. BEGIN CLEAN-UP. CONTACT CONSULTANT FOR HYDROGEOLOGICAL STUDY.     |                                           |                              |                          |
| 10138SG1422                                                                                   | PACE INC.                                 | DIESEL FUEL (3941 gallons)   | UNDERGROUND TANK         |
| 10/13/88                                                                                      | 11-35 TO EUCLID EXIT N., PACE INC.        |                              |                          |
| 0 HRS.                                                                                        | DES MOINES, IA (POLK)                     |                              | NONE                     |
| NATURE OF INCIDENT : NEW TANK WAS INSTALLED & CONNECTION IS LEAKING. 29" OF PRODUCT, GRAVEL   |                                           |                              |                          |
| RESPONSE ACTION : RECOVER PROD., MAKE REPAIRS. HOLE LINED W/CONCRETE PAD. SOIL COMPACTED.     |                                           |                              |                          |
| MR 1513                                                                                       | INTERSTATE POWER CO                       | HYDRAULIC OIL (2000 gallons) | UNDERGROUND TANK         |
| 07/07/93                                                                                      | 720 SOUTH TAFT                            |                              | UNKNOWN                  |
| 1513 HRS.                                                                                     | MASON CITY, IA (CERRO GORDO)              |                              |                          |
| NATURE OF INCIDENT : UNDERGROUND STORAGE TANK LEAK.                                           |                                           |                              |                          |
| RESPONSE ACTION : NONE. CALLER REPORTS THAT TANK HAS BEEN LEAKING SINCE AUGUST 15, 1984.      |                                           |                              |                          |
| 06038RK2000                                                                                   | MUSCATINE POWER & WATER                   | FUEL OIL #2 (8000 gallons)   | UNDERGROUND TANK         |
| 06/03/88                                                                                      | 3205 CEDAR STREET                         |                              |                          |
| 0 HRS.                                                                                        | MUSCATINE, IA (MUSCATINE)                 |                              | NONE                     |
| NATURE OF INCIDENT : UNDERGROUND LEAK. INVENTORY RECS INDICATE A LOSS. A LEAK IN UNDERGROUND. |                                           |                              |                          |
| RESPONSE ACTION : LINE WAS EMPTIED AND UNCOVERED. HELIUM INJECTED. TRENCHER & BACKHOE USED.   |                                           |                              |                          |

REGION VII  
: 12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAI

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|-------------------------------------------------------------------------------------------------|-----------------------------------|------------------------------------------------|-------------------|
| RPT-DATE                                                                                        | INCIDENT LOCATION                 |                                                | CAUSE             |
| RPT-TIME                                                                                        | CITY, ST., (CNTY)                 |                                                | WATERWAY AFFECTED |
| 06241M 1123                                                                                     | NAT. COOP. REFINERY ASSC.         | GASOLINE: AUTOMOTIVE (4.23G PB/G (500 barrels) | ABOVE GROUND TANK |
| 06/24/91                                                                                        | 825 E. OMAHA BRIDGE RD            |                                                | EQUIPMENT FAILURE |
| 1123 HRS.                                                                                       | COUNCIL BLUFFS, IA (POTTAWATOMIE) |                                                |                   |
| NATURE OF INCIDENT : RUPTURED DRAIN HOSE ON ABOVE GROUND STORAGE TANK.                          |                                   |                                                |                   |
| RESPONSE ACTION : CONTAINED IN DIKED AREA AND PUMPING INTO HOLDING TANK.                        |                                   |                                                |                   |
| 031990LP1840                                                                                    | LINCOLN FARM & HOME SERV.         | PREMIUM UNLEADED GASOLINE (3300 gallons)       | ABOVE GROUND TANK |
| 03/19/89                                                                                        | HENDERSON                         |                                                |                   |
| 0 HRS.                                                                                          | HENDERSON, IA (MILLS)             |                                                | NONE              |
| NATURE OF INCIDENT : RUPTURE IN ABOVE GROUND TANK. PRODUCT RELEASED TO SOIL.                    |                                   |                                                |                   |
| RESPONSE ACTION : EXCAVATION TO BEGIN ON MARCH 20, 1989.                                        |                                   |                                                |                   |
| 022780JA1345                                                                                    | GERRY BAUSTROM                    | GASOLINE/DIESEL (5300 gallons)                 | ABOVE GROUND TANK |
| 02/17/88                                                                                        |                                   |                                                |                   |
| 0 HRS.                                                                                          | KELLERTON, IA (RINGOLD)           |                                                | NONE              |
| NATURE OF INCIDENT : DRIPPING LEAK IN TWO TANKS, VALVES OF ABOVE GROUND STORAGE TANKS.          |                                   |                                                |                   |
| RESPONSE ACTION : WAS TOLD TO FIX LEAKS. HAVE TRUCK AVAILABLE IN CASE OF FIRE.                  |                                   |                                                |                   |
| 04268MDG1147                                                                                    | NEOWA F.S. COMPANY                | GASOLINE (3000 gallons)                        | ABOVE GROUND TANK |
| 04/16/88                                                                                        | NEOWA F.S. COMPANY                |                                                |                   |
| 0 HRS.                                                                                          | MAYNARD, IA (FAYETTE)             |                                                | NONE              |
| NATURE OF INCIDENT : PRODUCT LEAKED FROM AN ABOVE GROUND STORAGE TANK                           |                                   |                                                |                   |
| RESPONSE ACTION : AREA DIKED, SLUMP HOLED DUG, PRODUCT PUMPED FROM HOLES. REMAINDER TRANSFERRED |                                   |                                                |                   |
| 04268MDG1735                                                                                    | KANDB PIPELINE                    | GASOLINE (REGULAR) (536 barrels)               | ABOVE GROUND TANK |
| 04/26/88                                                                                        | CO. RD. B, 1 MI. S. W. OF MILFORD |                                                |                   |
| 0 HRS.                                                                                          | MILFORD, IA (DICKINSON)           |                                                | NONE              |
| NATURE OF INCIDENT : ABOVE GROUND STORAGE WAS OVERFILLED, PRODUCT CONTAINED WITHIN DIKED AREA.  |                                   |                                                |                   |
| RESPONSE ACTION : PUMPING SPILLED MATL. INTO PORTABLE CALIBRATION TANK. SUMPS TO BE PUMPED.     |                                   |                                                |                   |

ICM VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

>>>>>>>> THE FOLLOWING FIRST NOTIFICATION REPORTS REFLECT DATA COMPILED BY THE EPA PRIOR TO INVESTIGATION. <<<<<<<<<

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|-------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------|----------------------|
| RPT-DATE                                                                                  | INCIDENT LOCATION                       |                                   | CAUSE                |
| RPT-TIME                                                                                  | CITY, ST., (CNTY)                       |                                   | WATERWAY AFFECTED    |
| 09289RR 1105                                                                              | WILLIAMS PIPELINE                       | LEADED GASOLINE (2338 gallons)    | FIXED FACILITY       |
| 09/28/89                                                                                  |                                         |                                   |                      |
| 1146 HRS.                                                                                 | , IA (BLACK HAWK)                       |                                   | RETENTION POND       |
| NATURE OF INCIDENT :                                                                      |                                         |                                   |                      |
| RESPONSE ACTION : CONFINED IN RETENTION POND, VACUUM TRUCKS ON THE WAY TO CLEAN UP SPILL. |                                         |                                   |                      |
| 071300ES1624                                                                              | GREAT PLAINS PIPELINE CST               | OIL, FUEL: NO. 1-D (3500 gallons) | FIXED FACILITY       |
| 07/13/90                                                                                  | COUNTY RD. S-45                         |                                   |                      |
| 1710 HRS.                                                                                 | IOWA FALLS, IA (HARDIN)                 |                                   | LAND                 |
| NATURE OF INCIDENT :                                                                      |                                         |                                   |                      |
| RESPONSE ACTION : RECOVERING SPILL                                                        |                                         |                                   |                      |
| 07199RK 0747                                                                              | AMOCO OIL CO.                           | GASOLINE (3100 gallons)           | FIXED FACILITY       |
| 07/19/89                                                                                  | THREE MILES WEST OFF TOWN ON OLD HWY 34 |                                   | EQUIPMENT FAILURE    |
| 747 HRS.                                                                                  | OTTUMWA, IA (WAPELLO)                   |                                   | GROUNDWATER          |
| NATURE OF INCIDENT : SPILLED INTO DIKED AREA WITH CLAY LINER.                             |                                         |                                   |                      |
| RESPONSE ACTION : VACUUM TRUCK IS EN ROUTE. ADVISED CLARK TO NOTIFY FIRE DEPT.            |                                         |                                   |                      |
| ED1600                                                                                    | WILLIAMS PIPELINE CO                    | OIL: DIESEL (706 barrels)         | FIXED FACILITY       |
| 09/19/90                                                                                  | 4300 41ST ST                            |                                   |                      |
| 506 HRS.                                                                                  | SIOUX CITY, IA (WOODBURY)               |                                   | SOIL                 |
| NATURE OF INCIDENT :                                                                      |                                         |                                   |                      |
| RESPONSE ACTION : OIL IS IN CONTAINMENT AREA                                              |                                         |                                   |                      |
| 09289RK 1043                                                                              | WILLIAMS PIPELINE                       | LEADED GASOLINE (2338 gallons)    | FIXED FACILITY       |
| 09/28/89                                                                                  | 5360 ELDORA ROAD                        |                                   | EQUIPMENT FAILURE    |
| 1043 HRS.                                                                                 | WATERLOO, IA (BLACKHAWK)                |                                   | WATER RETENTION POND |
| NATURE OF INCIDENT : SEPARATOR SYSTEM - METER                                             |                                         |                                   |                      |
| RESPONSE ACTION : A VACUUM TRUCK IS PUMPING PRODUCT OFF THE WATER.                        |                                         |                                   |                      |

REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PJ

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| INCIDENT NUMBER                                                                                  | RESPONSIBLE PARTY                  | MATERIAL (quantity)              | SOURCE                  |
|--------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------|-------------------------|
| DATE                                                                                             | INCIDENT LOCATION                  |                                  | CAUSE                   |
| TIME                                                                                             | CITY, ST., (CNTY)                  |                                  | WATERWAY AFFECTED       |
| 02229DLP1015                                                                                     | SIERP OIL COMPANY                  | PETROLEUM PRODUCT (2697 gallons) | HIGHWAY                 |
| 02/22/89                                                                                         | HWY 34                             |                                  |                         |
| 0 HRS.                                                                                           | GLENWOOD, IA (MILLS)               |                                  | NONE                    |
| NATURE OF INCIDENT : A PASSENGER VAN CROSSING HWY 34 WAS HIT BROADSIDE BY A SIERP OIL TRANSPORT. |                                    |                                  |                         |
| RESPONSE ACTION : STATE PUBLIC SAFETY CONTAIN PRODUCT & PREVENT FURTHER RELEASE OF PRODUCT.      |                                    |                                  |                         |
| 01040JW 0327                                                                                     | (PACK?) TRANSPORT                  | GASOLINE (8700 gallons)          | HIGHWAY                 |
| 01/04/90                                                                                         |                                    |                                  | TRANSPORTATION ACCIDENT |
| 327 HRS.                                                                                         | GREELEY, IA (DELAWARE)             |                                  | NONE                    |
| NATURE OF INCIDENT : OVERTURNED CAR.                                                             |                                    |                                  |                         |
| RESPONSE ACTION : DOUG WILL RESPOND WHEN LIGHT & TRAVEL PERMITS.                                 |                                    |                                  |                         |
| 09279AT 1210                                                                                     | WAYNE TRANSPORT, INC.              | GASOLINE (7000 gallons)          | HIGHWAY                 |
| 09/27/89                                                                                         | HWY 14 & C-13 INTERSECTION         |                                  | TRANSPORTATION ACCIDENT |
| 1210 HRS.                                                                                        | GREENE, IA (BUTLER)                |                                  | NONE                    |
| NATURE OF INCIDENT : TRANSPORT AND CAR COLLIDED.                                                 |                                    |                                  |                         |
| RESPONSE ACTION : CONTAIN PRODUCT. PREVENT ENTRY OF PRODUCT TO A CONDUIT. CONTROL IGNITION.      |                                    |                                  |                         |
| 0890JA0410                                                                                       | BORK TRANSPORT                     | GASOLINE (9000 gallons)          | HIGHWAY                 |
| 09/08/89                                                                                         | MILE MARKER 175.5, WEST BOUND I-80 |                                  | TRANSPORTATION ACCIDENT |
| 410 HRS.                                                                                         | KELLOG, IA (JASPER)                |                                  | SURFACE WATER           |
| NATURE OF INCIDENT : SINGLE VEHICLE ACCIDENT, TRUCK OVERTURNED ON ITS TOP. POSSIBLY 9000 GAL.    |                                    |                                  |                         |
| RESPONSE ACTION : NO FIRE YET. STAY UPWIND OF FUMES. SAND TO DIKE DOWNGRADE FROM TRUCK.          |                                    |                                  |                         |
| 09089K 1627                                                                                      | BORK TRANSPORT INC                 | GASOLINE (4700 gallons)          | HIGHWAY                 |
| 09/08/89                                                                                         | 3 MILES EAST OF KELLOG, IOWA       |                                  |                         |
| 1708 HRS.                                                                                        | KELLOG, IA (JASPER)                |                                  | NORTH SKUNK RIVER       |
| NATURE OF INCIDENT :                                                                             |                                    |                                  |                         |
| RESPONSE ACTION : CO OFF LOADED 4,700 GALLONS, DIKE WAS BUILT AROUND SPILL BUT AT 1400 - 2 DIKES |                                    |                                  |                         |

ICW VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

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| CASE NUMBER                                                                                                                               | RESPONSIBLE PARTY                      | MATERIAL (quantity)                            | SOURCE                    |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------|---------------------------|
| RPT-DATE                                                                                                                                  | INCIDENT LOCATION                      |                                                | CAUSE                     |
| RPT-TIME                                                                                                                                  | CITY, ST., (CNTY)                      |                                                | WATERWAY AFFECTED         |
| 03133TJC1040                                                                                                                              | UNIVERSAL TRANSPORT                    | OIL, FUEL: NO. 2-D (2500 gallons)              | HIGHWAY                   |
| 03/13/93                                                                                                                                  | UNKNOWN                                |                                                | OTHER                     |
| 1059 HRS.                                                                                                                                 | CURTIS, NE (FRONTIER)                  |                                                |                           |
| NATURE OF INCIDENT : TANK TRAILER / VANDALS OPENED VALVE ON TRAILER OVERNIGHT.                                                            |                                        |                                                |                           |
| RESPONSE ACTION : DIKED A DITCH TO PREVENT RUNOFF TO STREAM. CONTAINED SPILL & COLLECTED WITH VAC TRUCKS.                                 |                                        |                                                |                           |
| 01182K 1037                                                                                                                               | FARMERS COOP                           | OIL: DIESEL (2000 gallons)                     | HIGHWAY FIXED FACILITY    |
| 01/18/92                                                                                                                                  | HIGHWAY 30/ NORTH BEND                 |                                                | TRANSPORTATION ACCIDENT   |
| 1119 HRS.                                                                                                                                 | 15 MILES WEST OF FREMONT               |                                                |                           |
|                                                                                                                                           | FREMONT, NE (DODGE)                    |                                                |                           |
| NATURE OF INCIDENT : FUEL TRANSPORT TRUCK / OVERFLOW OUT OF TOP OF TANK.                                                                  |                                        |                                                |                           |
| RESPONSE ACTION : PUMPING UP SPILLED PRODUCT / WYN SAFETY CO. TO HANDLE CLEANUP.                                                          |                                        |                                                |                           |
| 05223K 1711                                                                                                                               | UNION PACIFIC RAILROAD                 | OIL: DIESEL (1400 gallons)                     | HIGHWAY RAILWAY           |
| 05/22/93                                                                                                                                  | MILE POST 152.1 N PLAT SUBDIVISION 00T |                                                | TRANSPORTATION ACCIDENT   |
| 1447 HRS.                                                                                                                                 | CROSSING 815883F                       |                                                |                           |
|                                                                                                                                           | MITCHELL, NE (SCOTT'S BLUFF)           |                                                |                           |
| NATURE OF INCIDENT : DIESEL TANK ON ENGINE / CROSSING ACCIDENT.                                                                           |                                        |                                                |                           |
| RESPONSE ACTION : FRONT END LOADER REMOVING CONTAMINATED SOIL AND PLACING ON PLASTIC. WILL TRANSPORT SOIL TO PROPER REMEDIATION LOCATION. |                                        |                                                |                           |
| 04030JU 2105                                                                                                                              | AMSBERRY INC                           | GASOLINE: AUTOMOTIVE 4.23G PB/G (8800 gallons) | HIGHWAY                   |
| 04/03/90                                                                                                                                  | HWY 83 BETWEEN M.P. 135 AND 136        |                                                |                           |
| 2120 HRS.                                                                                                                                 | NORTH PLATTE, NE (THOMAS)              |                                                | TOP SOIL AND ASPHALT ROAD |
| NATURE OF INCIDENT : TRANSPORT TRUCK COLLISION WITH A COW.                                                                                |                                        |                                                |                           |
| RESPONSE ACTION : TANK WAS REMOVED / CLEANUP CREW IS EN ROUTE                                                                             |                                        |                                                |                           |
| 10039GH 1204                                                                                                                              |                                        | DIESEL (2900 gallons)                          | HIGHWAY                   |
| 10/03/89                                                                                                                                  | INTERSTATE 80 AND 60TH                 |                                                |                           |
| 1259 HRS.                                                                                                                                 | OMAHA, NE (DOUGLAS)                    |                                                | LITTLE PAPAIO RIVER       |
| NATURE OF INCIDENT :                                                                                                                      |                                        |                                                |                           |
| RESPONSE ACTION : FIRE DEPT IS ON SCENE                                                                                                   |                                        |                                                |                           |

REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

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| CASE NUMBER                                                                                                                           | RESPONSIBLE PARTY         | MATERIAL (quantity)                            | SOURCE            |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------|-------------------|
| RPT-DATE                                                                                                                              | INCIDENT LOCATION         |                                                | CAUSE             |
| RPT-TIME                                                                                                                              | CITY, ST., (CNTY)         |                                                | WATERWAY AFFECTED |
| 043008M 1720                                                                                                                          | WILLIAMS PIPELINE CO      | OIL, FUEL: NO. 2 (71 barrels)                  | PIPELINE          |
| 07/30/90                                                                                                                              | 2503 SE 43RD ST.          |                                                |                   |
| 1731 HRS.                                                                                                                             | DES MOINES, IA (POLK)     |                                                | CONTAINMENT AREA  |
| NATURE OF INCIDENT :                                                                                                                  |                           |                                                |                   |
| RESPONSE ACTION : MATERIAL IS BEING RECOVERED FROM CONTAINMENT AREA                                                                   |                           |                                                |                   |
| 06038RK2000                                                                                                                           | MUSCATINE POWER & WATER   | FUEL OIL #2 (8000 gallons)                     | PIPELINE          |
| 06/03/88                                                                                                                              | 3205 CEDAR STREET         |                                                |                   |
| 0 HRS.                                                                                                                                | MUSCATINE, IA (MUSCATINE) |                                                | NONE              |
| NATURE OF INCIDENT : UNDERGROUND LEAK. INVENTORY RECDs INDICATE A LOSS. A LEAK IN UNDGRD                                              |                           |                                                |                   |
| RESPONSE ACTION : LINE WAS EMPTIED AND UNCOVERED. HELIUM INJECTED. TRENCHER & BACKHOE USED.                                           |                           |                                                |                   |
| 05203NTR1030                                                                                                                          | SOO LINE RAILROAD CO      | OIL, FUEL: NO. 2 (3000 gallons)                | PIPELINE          |
| 05/20/93                                                                                                                              | HEAR 1300 N WILDWOOD DR   |                                                | OPERATIONAL ERROR |
| 1053 HRS.                                                                                                                             | OTTUMWA, IA (WAPELLO)     |                                                |                   |
| NATURE OF INCIDENT : PIPELINE DAMAGED DURING DEMOLITION OPERATION IN VICINITY OF STORAGE TANK.                                        |                           |                                                |                   |
| RESPONSE ACTION : CONTRACTOR ON SITE INVESTIGATING EXTENT OF SPILL, WILL EXCAVATE CONTAMINATED SOIL AND COLLECT ANY STANDING PRODUCT. |                           |                                                |                   |
| 03290M 1839                                                                                                                           | WILLIAMS PIPELINE CO      | GASOLINE: AUTOMOTIVE (4.23G PB/G (200 barrels) | PIPELINE          |
| 03/29/90                                                                                                                              | CO. FACILITY 4300 41ST ST |                                                |                   |
| 1904 HRS.                                                                                                                             | SIOUX CITY, IA (WOODBURY) |                                                | LAND              |
| NATURE OF INCIDENT : 10" TRANSMISSION LINE.                                                                                           |                           |                                                |                   |
| RESPONSE ACTION : LEAK ISOLATED AND REPAIRED.                                                                                         |                           |                                                |                   |
| 11080MM 1410                                                                                                                          | WAREHOUSE PAPER CO.       | OIL, FUEL: NO. 2 (12000 gallons)               | PIPELINE          |
| 11/08/90                                                                                                                              | 800 W. PARKER STREET      |                                                | EQUIPMENT FAILURE |
| 1500 HRS.                                                                                                                             | WATERLOO, IA (BLACK HAWK) |                                                |                   |
| NATURE OF INCIDENT : 3/4" RETURN LINE CORRODED.                                                                                       |                           |                                                |                   |
| RESPONSE ACTION : CONTRACTOR TO CLEANUP.                                                                                              |                           |                                                |                   |

REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE:

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| CASE NUMBER                                                                                    | RESPONSIBLE PARTY                   | MATERIAL (quantity)              | SOURCE                |
|------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------|-----------------------|
| RPT-DATE                                                                                       | INCIDENT LOCATION                   |                                  | CAUSE                 |
| RPT-TIME                                                                                       | CITY, ST., (CITY)                   |                                  | WATERWAY AFFECTED     |
| 02010WR 1055                                                                                   | BURLINGTON NORTHERN R/R             | OIL, FUEL: NO. 2 (65795 gallons) | ABOVE GROUND TANK     |
| 02/01/90                                                                                       | ALLIANCE RAILYARD 500 W. KANSAS ST. |                                  | EQUIPMENT FAILURE     |
| 1132 HRS.                                                                                      | ALLIANCE, NE (BOX BUTTE)            |                                  | GROUND                |
| NATURE OF INCIDENT : ABOVE GROUND TANK                                                         |                                     |                                  |                       |
| RESPONSE ACTION : EXCAVATING SOIL. FREESTANDING LIQUID BEING PUMPED UP.                        |                                     |                                  |                       |
| 02178NEW1530                                                                                   | RON'S SINCLAIR                      | GASOLINE (2000 gallons)          | ABOVE GROUND TANK     |
| 02/17/88                                                                                       | SECOND & LINCOLN                    |                                  |                       |
| 0 HRS.                                                                                         | HERSHEY, NE (LINCOLN)               |                                  | NONE                  |
| NATURE OF INCIDENT : ABOVEGROUND TANK WHICH SUPPLIES FUEL TO UST'S DEVELOPED A HOLE IN BASE.   |                                     |                                  |                       |
| RESPONSE ACTION :                                                                              |                                     |                                  |                       |
| 03268M1157                                                                                     | SENSEN 66 SERVICE INC.              | OILS: DIESEL (5000 gallons)      | ABOVE GROUND TANK     |
| 03/24/88                                                                                       | ALAN OIL CO                         |                                  | UNKNOWN               |
| 1157 HRS.                                                                                      | OMAHA, NE (DOUGLAS)                 |                                  | NONE                  |
| NATURE OF INCIDENT : CONTENTS OF 5000G ABOVE GRND STORAGE TANK SPILLED TO DIKED AREA           |                                     |                                  |                       |
| RESPONSE ACTION : RP HAS CONTRACTOR ON-SITE, NO ACTION AS YET, HAS SOAKED INTO GRND, BY CREEK. |                                     |                                  |                       |
| 1JW 2050                                                                                       | KOCH MATERIALS COMPANY              | ASPHALT EMULSION (11000 gallons) | ABOVE GROUND TANK     |
| 06/91                                                                                          | 1404 GRACE ST.                      |                                  | EQUIPMENT FAILURE     |
| 2050 HRS.                                                                                      | OMAHA, NE (DOUGLAS)                 |                                  | STORM SEWER (100 GAL) |
| NATURE OF INCIDENT : ABOVE GROUND STORAGE TANK REPUTURED FLOWLINE FROM THE TANK.               |                                     |                                  |                       |
| RESPONSE ACTION : MATL SPILLED INTO CONTAINMENT DIKE, -100 GAL WENT TO SUMP THE STORM SEWER.   |                                     |                                  |                       |
| 06272JW 0850                                                                                   | CHEIFTAN VAN LINES                  | OIL, FUEL: NO. 2-D (750 gallons) | ABOVE GROUND TANK     |
| 06/27/92                                                                                       | 7201 MAIN STREET                    |                                  | TRANSPORTATION ACCID  |
| 917 HRS.                                                                                       | RALSTON, NE (DOUGLAS)               |                                  |                       |
| NATURE OF INCIDENT : ABOVE GROUND FUEL TANK / HIT BY DRIVER.                                   |                                     |                                  |                       |
| RESPONSE ACTION : RECOVERED WITH SORBENTS AND WILL THEN EXCAVATE CONTAMINATED SOIL.            |                                     |                                  |                       |



REGION VII  
12/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

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| CASE NUMBER                                                                                    | RESPONSIBLE PARTY          | MATERIAL (quantity)              | SOURCE            |
|------------------------------------------------------------------------------------------------|----------------------------|----------------------------------|-------------------|
| RPT-DATE                                                                                       | INCIDENT LOCATION          |                                  | CAUSE             |
| RPT-TIME                                                                                       | CITY, ST., (CITY)          |                                  | WATERWAY AFFECTED |
| 020980BH0915                                                                                   | MID STATE COOP             | GASOLINE (900 gallons)           | UNDERGROUND TANK  |
| 02/09/88                                                                                       | FARMERS COOP               |                                  | NONE              |
| 0 HRS.                                                                                         | AMSELMO, NE (CLUSTER)      |                                  |                   |
| NATURE OF INCIDENT : 3000 GAL. TANK FUELED BEFORE WEEKEND, CONTENTS LOST OVER WEEKEND.         |                            |                                  |                   |
| RESPONSE ACTION :                                                                              |                            |                                  |                   |
| 01088SMS1540                                                                                   | WHITE WAY SERVICE          | UNLEADED GASOLINE (1100 gallons) | UNDERGROUND TANK  |
| 01/08/88                                                                                       | CENTER AVE. & EASTON ST.   |                                  | NONE              |
| 0 HRS.                                                                                         | ASHTON, NE (SHERMAN)       |                                  |                   |
| NATURE OF INCIDENT : TANK LEAKING AT ABOUT 40 GAL/MIN. FROM 2000-GAL TANK. MUNICIPAL WELLS     |                            |                                  |                   |
| RESPONSE ACTION :                                                                              |                            |                                  |                   |
| 0827BK1649                                                                                     | SINCLAIR OIL               | UNLEADED GASOLINE (4500 gallons) | UNDERGROUND TANK  |
| 08/27/88                                                                                       | 2009 W. 2 STREET           |                                  | NONE              |
| 0 HRS.                                                                                         | GRAND ISLAND, NE (HALL)    |                                  |                   |
| NATURE OF INCIDENT : EQUIPMENT FAILURE. LOSS OF 4500 GALLONS. NOW CHECKING TANK.               |                            |                                  |                   |
| RESPONSE ACTION : EPA CALLED NDEC.                                                             |                            |                                  |                   |
| 020980BH1430                                                                                   | PANHANDLE COOP             | GASOLINE (900 gallons)           | UNDERGROUND TANK  |
| 02/19/88                                                                                       | 1145 FOURTEENTH STREET.    |                                  | NONE              |
| 0 HRS.                                                                                         | MITCHELL, NE (SCOTTSBLUFF) |                                  |                   |
| NATURE OF INCIDENT : INVENTORY DISCREPANCY IN FILLED TANK OF PRODUCT. LOST 33 GAL. OVER 12 HRS |                            |                                  |                   |
| RESPONSE ACTION :                                                                              |                            |                                  |                   |
| 05010TJC1115                                                                                   | LUND-ROSS CONTRACTORS      | #6 DIESEL (1520 pounds)          | UNDERGROUND TANK  |
| 05/01/90                                                                                       | 1307 LEAVENWORTH           |                                  | OTHER             |
| 1115 HRS.                                                                                      | OMAHA, NE (DOUGLAS)        |                                  | GROUNDWATER       |
| NATURE OF INCIDENT : REMOVING UST WHEN A HOLE WAS ACCIDENTALLY PUNCHED IN THE BOTTOM OF TANK.  |                            |                                  |                   |
| RESPONSE ACTION : STATE IS WORKING WITH COMPANY ON CLEANUP.                                    |                            |                                  |                   |
| 10078CAB0915                                                                                   | TRANS CON LINE             | DIESEL FUEL (1000 gallons)       | UNDERGROUND TANK  |
| 10/07/88                                                                                       | 5900 N 16TH ST             |                                  | NONE              |
| 915 HRS.                                                                                       | OMAHA, NE (DOUGLAS)        |                                  |                   |
| NATURE OF INCIDENT : TRANSFER LINE FROM UNDERGROUND TANK FAILURE                               |                            |                                  |                   |
| RESPONSE ACTION : TEST WELLS FROM PREVIOUS MONITORING PROGRAM ALL BEING MONITORED              |                            |                                  |                   |

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D. 2/20/93

EMERGENCY PLANNING AND RESPONSE BRANCH  
INCIDENT NOTIFICATION REPORT

PAGE: 1

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| CASE NUMBER                                                                                         | RESPONSIBLE PARTY                | MATERIAL (quantity)                | SOURCE                  |
|-----------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------|-------------------------|
| RPT-DATE                                                                                            | INCIDENT LOCATION                |                                    | CAUSE                   |
| RPT-TIME                                                                                            | CITY, ST., (CNTY)                |                                    | WATERWAY AFFECTED       |
| 02249H0950                                                                                          | BURLINGTON NORTHERN R.R.         | DIESEL FUEL (3500 gallons)         | RAILWAY                 |
| 02/24/89                                                                                            | 500 NORTH KANSAS ST.             |                                    |                         |
| 0 HRS.                                                                                              | ALLIANCE, NE (BOX BUTTE)         |                                    | NONE                    |
| NATURE OF INCIDENT : TANK CAR BNS75050 LEAKING-TWO BOLTS BROKEN SEAL.                               |                                  |                                    |                         |
| RESPONSE ACTION : OFF LOAD TANK CAR. COLLECTED PRODUCT VIA DRAIN.                                   |                                  |                                    |                         |
| 05182DES2034                                                                                        | UNION PACIFIC RAILROAD           | NAPHTHA: COAL TAR (270 tons)       | RAILWAY                 |
| 05/18/92                                                                                            | MILE POST 244                    |                                    | EQUIPMENT FAILURE       |
| 2118 HRS.                                                                                           | GOTHENBURG, NE (DAWSON)          |                                    |                         |
| NATURE OF INCIDENT : FAILED JOURNAL CAUSED DERAILMENT OF 10 CARS.                                   |                                  |                                    |                         |
| RESPONSE ACTION : HAZMAT TEAM ENROUTE.                                                              |                                  |                                    |                         |
| 08099WR 1025                                                                                        | BURLINGTON R.R.                  | DIESEL FUEL (4000 gallons)         | RAILWAY                 |
| 08/09/89                                                                                            | PLATTE RIVER NEAR GUERNSEY, NEB. |                                    | TRANSPORTATION ACCIDENT |
| 1025 HRS.                                                                                           | GUERNSEY, NE ( )                 |                                    | PLATTE RIVER            |
| NATURE OF INCIDENT : LOCOMOTIVE FIRE - TANK                                                         |                                  |                                    |                         |
| RESPONSE ACTION : BURLINGTON R.R. IS RESPONDING.                                                    |                                  |                                    |                         |
| 1803                                                                                                | UNION PACIFIC RAILROAD           | OIL, FUEL: NO. 2-D (10000 gallons) | RAILWAY                 |
| 0. 93                                                                                               | 2900 WEST FRONT ST               |                                    | EQUIPMENT FAILURE       |
| 1921 HRS.                                                                                           | NORTH PLATTE, NE (LINCOLN)       |                                    |                         |
| NATURE OF INCIDENT : PIPE BETWEEN 2 TANKS BROKE.                                                    |                                  |                                    |                         |
| RESPONSE ACTION : CREATED EARTHEN DAM, CREW EN ROUTE TO PICK UP SPILL. NDEC NOTIFIED AT 1810 HOURS. |                                  |                                    |                         |
| 121500ES0750                                                                                        | UNION PACIFIC RAILROAD           | OIL: DIESEL (5000 gallons)         | RAILWAY                 |
| 12/15/90                                                                                            | RAIL YARD MP WX 284              |                                    |                         |
| 843 HRS.                                                                                            | NORTH PLATTE, NE (LINCOLN)       |                                    |                         |
| NATURE OF INCIDENT :                                                                                |                                  |                                    |                         |
| RESPONSE ACTION : COMPANY CREWS HAVE VAC TRUCK ON SCENE.                                            |                                  |                                    |                         |
| 05268R0915                                                                                          | CNEW RAILROAD                    | OILS: DIESEL (5000 gallons)        | RAILWAY                 |
| 05/26/88                                                                                            | 4.8 RR MI EAST OF VALENTINE, NE  |                                    | TRANSPORTATION ACCIDENT |
| 915 HRS.                                                                                            | VALENTINE, NE (CHERRY)           |                                    | NIOBRARA RIVER          |
| NATURE OF INCIDENT : TRAIN HIT WASHOUT, OVERTURNED, RUPTURED FUEL CELLS.                            |                                  |                                    |                         |
| RESPONSE ACTION :                                                                                   |                                  |                                    |                         |

## ANNEX I

### USCG/EPA MOU

Enclosure (1) to Annex 00 to Region VII Regional Contingency Plan

MEMORANDUM OF UNDERSTANDING BETWEEN THE  
SECOND COAST GUARD DISTRICT  
AND THE  
ENVIRONMENTAL PROTECTION AGENCY, REGION VII

**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE U. S. ENVIRONMENTAL PROTECTION AGENCY  
REGION VII. KANSAS CITY, KS  
AND  
THE U. S. COAST GUARD  
SECOND COAST GUARD DISTRICT. ST. LOUIS, MO  
CONCERNING  
FEDERAL ON SCENE COORDINATOR RESPONSIBILITIES IN THE INLAND ZONE  
WITHIN THE SECOND COAST GUARD DISTRICT**

**PURPOSE:** The purpose of this document is to delineate the role and responsibilities of U. S. Coast Guard personnel relative to pollution response activities on the Inland River System. Specifically, this document:

1. Eliminates previously designated "specified ports and harbors" on the Inland Rivers within the Second Coast Guard District, thereby redesignating the entirety of the Second Coast Guard District as Inland Zone wherein the U. S. Environmental Protection Agency is the predesignated Federal On Scene Coordinator agency.
2. Confirms the Second Coast Guard District's commitment to meeting the spirit as well as the letter of the National Contingency Plan and assisting the U. S. Environmental Protection Agency predesignated Federal On Scene Coordinator to the fullest extent possible in all pollution response activities.
3. Identifies operational criteria under which the U. S. Coast Guard will assist the U. S. Environmental Protection Agency with its On Scene Coordinator (OSC) responsibilities by acting as the lead agency and providing personnel to fill the OSC role for actual or threatened pollution incidents involving commercial vessels or marina transportation-related facilities.

**BACKGROUND:** Under a previous agreement, the U. S. Environmental Protection Agency, Region VII, and the Second Coast Guard District had identified certain geographic areas on the Inland River System for which the U. S. Coast Guard would, under certain circumstances, provide a "predesignated" Federal On Scene Coordinator. In general, in the specified port and harbor areas, the U. S. Coast Guard Captain of the Port was predesignated as the OSC for oil and hazardous substance discharges resulting from vessel casualties or vessel-related transfer operations. The U. S. Environmental Protection Agency retained the OSC responsibilities for all other pollution incidents within the specified ports and harbors and for all incidents outside those limited geographic areas.

The Oil Pollution Act of 1990 amended the Federal Water Pollution Control Act and imposed new pollution response preparedness and removal requirements on industry and government, including the predesignated Federal On Scene Coordinator. The requirements of the Oil Pollution Act prompted a complete review of agency responsibilities pursuant to the Act itself and the National Contingency Plan. That review indicated that the division of agency On Scene Coordinator responsibilities along a combination of geographic and functional lines did not provide the best mechanism for planning and coordination of current National Response System activities.

This document redefines agency responsibilities along wholly functional lines that are consistent with traditional agency authorities. It also provides for effective integration of preparedness and removal activities in a manner consistent with the requirements of the National Contingency Plan.

#### AGREEMENT:

The entirety of the Second Coast Guard District, including the Inland River System within the Second District, is included in the definition of Inland Zone wherein the U. S. Environmental Protection Agency (USEPA) is the predesignated Federal On Scene Coordinator agency. The previous agreement designating specified ports and harbors as portions of the Coastal Zone is cancelled.

The U. S. Coast Guard (USCG), through the cognizant Captain of the Port (COTP), will assist the predesignated USEPA On Scene Coordinator (OSC) to the fullest extent possible consistent with agency responsibilities and authorities. Specifically, for all pollution incidents where there is an actual discharge or release, or a substantial threat of such a discharge or release, of a pollutant into or on the navigable waters of the United States or the adjacent riverbank, the U. S. Coast Guard will respond as follows:

1. If the incident involves a commercial vessel, a vessel transfer operation, or a marine transportation related facility, the USCG COTP will provide the OSC and carry out all of the OSC responsibilities, including the decision to direct any necessary removal activity or access the Oil Spill Liability Trust Fund. In such cases, the predesignated USEPA OSC will be advised of any response actions that the COTP takes via initial telephone notification and periodic pollution reports.
2. If the incident involves a source or threat other than a commercial vessel, vessel transfer operation, or marine transportation-related facility, or if the incident involves an unknown source of pollution:

a. The USCG COTP will carry out the USCG's agency responsibilities under the NCP, the Regional Contingency Plan, and, when developed, the Area Contingency Plans, and will assist the USEPA OSC to the fullest extent possible.

b. Upon request by the predesignated USEPA OSC, the USCG COTP will act on behalf of the USEPA in any actions where the USCG personnel are both qualified and physically capable of responding. The type and extent of the USCG's actions in each case will be determined by consultation between the USEPA OSC and the USCG COTP.

c. If specifically requested by the predesignated USEPA OSC, the USCG COTP may assume the functional OSC role and carry out all of the OSC responsibilities for a particular incident. The final decision on acceptance of the functional OSC role will rest with the COTP on an incident-specific basis.

d. If the USCG is the first agency notified of such an incident, the USCG will notify the predesignated USEPA OSC and assist in assessing the situation and the need for a Federal response.

e. If a USCG representative is the first Federal official arriving on scene at such an incident, the USCG will notify the predesignated USEPA OSC and carry out the duties detailed in the NCP pending arrival of the predesignated OSC.

3. This agreement will be incorporated into the agency responsibilities section of the Regional Contingency Plan.

**TERM OF AGREEMENT:** This agreement will be subject to review and amendment coincident with each periodic review of the Regional Contingency Plan and at any other time at the request of either of the parties. It will remain in effect until modified or terminated by subsequent agreement.

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Acting Regional Administrator  
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Agency, Region VII  
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Date: April 8, 1993

  
Date: March 30, 1993

## ANNEX II

# DISPOSAL REQUIREMENTS

UNDER DEVELOPMENT



## **ANNEX III**

### **UNIFIED COMMAND SYSTEM**

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# Unified Command System (UCS)

## PROTOCOL

A UNIFIED COMMAND SYSTEM (UCS) SHALL BE ESTABLISHED AT ALL INCIDENTS INVOLVING HAZARDOUS SUBSTANCES BY SENIOR ON-SCENE OFFICIAL OF THE FIRST RESPONSE ORGANIZATION TO ARRIVE AN INCIDENT.

The UCS should be based on the organization, terminology and procedures recommended by the National Fire Academy and applied in abroad sense to include all hazard control and mitigation response organizations including responsible parties, private responders and local, state and federal agencies. All such entities participating in a response are required by federal law to implement an intra-organization ICS and integrate it with the overall UCS.

The UCS established will have as the Incident Commander (IC) the most senior on-scene official with the expertise, capability, authority, and determination to be the commander. The IC can be from a local unit of government or from a county, state, or federal agency. This protocol recognizes that typically, but not necessarily, the IC will change as the incident progresses from being primarily a public safety problem, with the local fire chief as IC, to an environmental incident with a state or federal person as the IC. The following procedures specify a determinate yet feasible means of establishing the role of federal and state responders in a UCS.

### I. SINGLE JURISDICTIONAL ARE AFFECTED

When the incident involves and affects only a single local geographical jurisdiction, the organizational structure of the UCS or Incident Command System will be determined by the established local contingency plan. This may involve single or multiple agency involvement. In all situations one person shall act as an Incident Commander in sole charge, or function as an Operations Chief to implement the action plan of a Unified Command.

In-such instances, responding state and federal officials, who might otherwise be considered the senior competent emergency response official at the site, shall either:

1. Identify themselves to the Incident Commander and integrate themselves into the established ICS per the Incident Commander's direction, usually as a technical specialist to an

operations group supervisor or as an operations group supervisor:  
or

2. Join an existing Unified Command or request the Incident Commander to establish a Unified Command: or

3. Assume the Incident Command role when required by federal or state law, or when an existing Incident Commander agrees to such a transition, or when no ICS or UCS has been established.

The ICS transfer of command or initial assumption of command protocols shall be used.

## II. MULTIPLE JURISDICTIONAL AREAS AFFECTED

When the incident involves and affects multiple local geographical jurisdictions or areas not covered by local emergency response organizations, the state or federal competent senior official at the site shall either:

1. Preferably join an existing Incident command or Unified Command as in I above; or

2. Establish a Unified Command for an encompassing ICS if none exists; or

3. Assume Incident Command and establish a UCS incorporating existing local efforts as operations section branches or otherwise as appropriate.

## III. LOCAL, STATE, FEDERAL INTERACTION

When not specifically prescribed, a Unified Command Consisting of local, state, and federal senior competent emergency response officials at the site shall be the preferred approach to integrating several levels of government into a United Command System. Where state law specifies incident command assignments, it shall take precedence over this protocol with respect to those state and local organizations to which it applies. Federal jurisdiction specified in CERCLA, OPA or the RCP shall take precedence over this protocol.

Breadth of responsibility will be considered to increase from most local to state to federal. However, this protocol encourages the establishment of the UCS at the most local level practicable to assure the earliest implementation of a unified response strategy.

## UNIFIED COMMAND SYSTEM

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UCS is used to answer several questions frequently arising in an emergency situation:

1. Who is in charge?
2. Whose codes or terminology do we use to communicate?
3. How do I prevent individual overload and still utilize all available resources effectively?
4. How do I assure maximum personnel safety?
5. How can I effectively blend more than one department or agency at an incident?
6. How can I effectively utilize and/or follow NCP, RCP, ACP, and any local contingency plans?

As the initial "SIZE-UP" indicates the need for more personnel and equipment, the UCS allows the IC to delegate such duties as safety, operations, planning, resources, staging and press information to others qualified personnel. The people handle the assigned areas and report results and findings to the IC. The IC will make all major decisions and maintain overall responsibility for the incident: BUT by assigning these areas to others as the incident expands, the IC avoids overloading personnel to the point they cannot perform assigned duties effectively.

#### INCIDENT COMMANDER

As the level of response increases, so does the difficulty of effectively managing the incident. The person charged with overall control of the incident is the "incident commander". Unless otherwise directed by policy the incident commander is the senior responding officer, and it shall be this officer's responsibility to establish the Incident Command System. As the scope of an incident increases, then the incident commander ultimately is the person with the greatest jurisdictional responsibility as defined by law. The incident commander has several specific responsibilities at the scene of a hazardous materials incident, some of which are as follows:

1. Assume control of all emergency responders and personnel at the site.
2. Control and co-ordinate all communications at the site.
3. Identify to the extent possible all of the hazardous substances and conditions present.
4. Limit the number of emergency response personnel at the site to those "actively" performing "authorized" emergency operations.

5. Ensure that personal protective equipment utilized will be appropriate for the materials and conditions involved; and establish the levels of protection to be used at the various areas of the site.
6. Ensure that operations being performed in hazardous areas are done utilizing the "buddy system" and that backup personnel are immediately available in the same level of protection for rescue or assistance.
7. Ensure that emergency medical personnel with transport capability are on-site AND that they have been briefed about the specific hazards and decontamination procedures for personnel and equipment.
8. Ensure that the medical facility which will receive any casualties is briefed about the specific hazards on-site.
9. Establish and maintain an easily recognized command post in a safe area on the site.
10. Ensure that the minimum number of entries are made into hazardous areas AND that each entry has a "clear" and "necessary" purpose.
11. Be knowledgeable of available resources and mobilize all of the necessary resources to successfully conclude the incident.
12. Effectively blend and efficiently utilize the diverse resources available.
13. Ensure hazard zones are well marked and entry is controlled.
14. Appoint a site safety officer (if not designated by policy).
15. Shall implement appropriate decontamination procedures after all emergency operations are terminated.

The incident commander of a large incident cannot personally control every aspect of the incident AND be an effective emergency manager. To accomplish this goal U.C.S. establishes a chain of command and reporting which limits the number of personnel reporting directly to the I.C. - (These positions are those of the Operations Commander, Logistics Commander, Plans Commander, and the Command Staff.) With the information channels established, information flows to the I.C. who can then make the correct

tactical decisions. One other person has direct communications with the I.C., and that person is the site safety officer.

OSHA 29 CFR 1910.120 requires the following for incident commanders at hazardous materials incidents (P.9329). "Incident commanders, who will assume control of the incident scene beyond the first responder awareness level, shall receive at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and the employer shall so certify:

- (A) Know and be able to implement the employer's incident command system.
- (B) Know how to implement the employer's emergency response plan.
- (C) Know and understand the hazards and risks associated with employees working in chemical protective clothing.
- (D) Know how to implement the local emergency response plan.
- (E) Know of the state emergency response plan and of the Federal Regional Response Team.
- (F) Know and understand the importance of decontamination procedures.

#### **SITE SAFETY OFFICER**

O.S.H.A. requires that the site safety officer be knowledgeable in firefighting OR rescue AND hazardous substances handling procedures. The position of the site safety officer is required to assure the safest possible working environment for on-site personnel. The site safety officer must have a thorough knowledge of personal protective equipment, decontamination procedures, and site safety procedures. The person in this position has the following responsibilities at the site of a hazardous materials incident:

1. Identify and evaluate the hazards on-site AND provide direction to the I.C. with respect to the safety of operations for the emergency at hand.
2. Establishes and clearly marks hazardous zones on-site.
3. Shall specify the level of protection to be used in the established zones on-site.

4. Shall establish the decontamination line prior to entry into hazardous zones.
5. Assures that the minimum numbers of entries are made into hazardous areas, that each entry has a "necessary" purpose, and that the minimum time necessary to complete the purpose is spent downrange.
6. Gives final approval for "each" person entering a hazardous area based on the above criteria.
7. Will keep detailed records of personnel entering hazardous areas which include:
  - Name
  - Level of protection
  - Time entering/ time leaving hazardous area
  - Vital signs before and after entry
  - Tasks performed
  - Any exposure information
8. Research hazards and symptoms of exposure of the materials involved.
9. Immediately alter or suspend any operation on-site when unsafe actions or conditions exist AND immediately notify the I.C. of actions taken and the reasons.
10. Will maintain direct communications with the I.C. at all times.
11. Establish EMS and hospital support.
12. Monitor boundaries around hazardous zones for any changes in conditions.
13. Deny entry into any hazardous zone to anyone not authorized by the I.C.
14. Inspects (or causes to be inspected) all personnel entering hazardous areas to ensure personal protective equipment is "properly" donned.
15. Complete a written site safety plan as soon as possible.

The site safety officer is one of the staff officers who might not be at the command post during the incident, but must remain in contact with the I.C. and remain knowledgeable of all operations in

hazardous areas. As the scope of the incident increases, the site safety officer may need personnel assigned to safety operations to assure all of the responsibilities are met at all hazardous locations on-site. These designated personnel will report directly to the site safety officer who will report directly to the I.C. The site safety officer's position is imperative if an incident is to be brought to a successful conclusion.

#### **PLANNING**

Another facet of the U.C.S. is the planning section. The head of the planning section reports directly to I.C. The planning section is responsible for maintaining a current situation status report, a current list of resources and their availability, and maintaining contact with technical advisors. By maintaining this information "Plans" provides a very important function, and that is "documentation" of the incident on a real time basis. "Plans" provides recommendations based on all of the information available to the I.C. concerning tactics for handling the incident.

#### **LOGISTICS**

The "Logistics" section is responsible for maintaining personnel and equipment sufficient to keep the site functioning. Logistics oversees staging of personnel and equipment, supplies, and communications. Logistics also provides "base area" functions for personnel not on-site or in staging areas (food, shelter, rest area, etc). Logistics provides current information to the I.C. and Plans about these functions in reference to availability and capability of resources on-site.

#### **OPERATIONS**

"Operations" is the group which actually performs the designated tasks. The person in charge of operations reports directly to the I.C. concerning the status of task completion on-site. Before operations can commit to a task, the commander can review information from Plans and Logistics to assure the resources needed are available to properly perform the task. To prevent overload, personnel reporting to any one person should be limited to a reasonable number, or span of control. If the number of task groups exceeds this number, the operations area can then be divided into sectors with each sector containing a number of task units. Each sector officer would then report to the operations commander.

The Unified Command System is a blueprint for an effective emergency management structure. Personnel who will be expected to function within this system should be trained on roles and



responsibilities of the U.C.S. components. The final stage of U.C.S. development is drilling (practicing) with all of the agencies who would respond to a hazardous materials incident. To properly identify persons or agencies who would respond to a hazardous materials situation, the agency responsible for overseeing these incidents should conduct an ongoing hazard analysis program and preplan the resources necessary to handle the anticipated problems.

#### SITE CONTROL

Responders to a hazardous materials incident are charged with five basic areas of responsibility. All of these areas are dependent on the others, and they all require constant updating by the responders to assure that all of the actions taken and all protective equipment used are correct for the current situation. These five areas are:

1. DETECT THE PRESENCE - Identify the materials involved and determine the hazards they present.
2. ESTIMATE - the likely risks these materials pose to the public and the environment.
3. CONTROL - What methods can be used to reduce the impact of the incident.
4. INFORMATION - Verify existing information and always be alert for new information at the site.
5. SAFETY - Protect all responders from harm.

The incident commander and the site safety officer are responsible for the activation and continuation of these five important tasks. These responsibilities begin with the first response and continue until the site is cleared.

The incident commander and the site safety officer are both charged with something called "site control". Site control is composed of two basic parts:

1. Clearly establishing and marking hazardous areas.
2. Rigidly controlling entry and egress from these areas.

Site control is the mechanism which attempts to confine contamination to the areas which were initially contaminated. To

prevent entry by unauthorized personnel and vehicles, to maintain safe control over operations personnel, and to reduce the spreading of a hazardous substance beyond the area of initial contamination, a hazardous materials incident is usually divided into three distinct zones. These zones are:

- HOT ZONE - Area of actual hazard or contamination. Also known as the exclusion zone.
- WARM ZONE - Buffer area around the hot zone. This zone contains the contamination reduction corridor.
- COLD ZONE - Area around the warm zone which doesn't require any special protection. Also known as the support zone, safe zone, or clear area.

As with the size of the U.C.S. structure, the nature of the incident determines the number of zones and the respective size of the zones.

The first zone to be established is the HOT ZONE. The hot zone contains the hazardous substances, any runoff, and dangerous levels of any toxic or flammable vapor produced. The original size of the exclusion zone is determined by the first arriving emergency responder and is usually the evacuation distance obtained from the D.O.T. Emergency Response Guidebook. As more "site specific" information becomes available, the incident commander will decide whether the "hot zone" is sufficient, should be enlarged, or can be reduced. The size of this exclusion area is determined by many factors, most of which are dynamic.

The most obvious factor determining the size and shape of the hot zone is the hazardous substance(s) involved. A lump of solid material which will safely sit until recovered will require a small exclusion zone, whereas a volatile or fuming liquid would require an exclusion area larger than the area actually covered by the substance. The amount of the substance, physical properties of the substance, and chemical properties of the substance will be factors in determining the size of the exclusion zone. The number, size, shape, and condition of the hazardous substances containers will also affect the exclusion boundaries.

Weather conditions will definitely be a factor in establishing a hot zone. If a hazardous substance is (or could become) airborne, then wind must be considered. Humidity can help control a material or make it reactive. Precipitation can cause severe difficulty in attempting to contain a material. Temperature can make a material reasonably stable or highly volatile. Another thing to remember

about the weather is that it will probably change. Current weather conditions AND the weather forecast are important planning elements!

Topography may dictate an irregularly shaped zone by providing natural barriers or channels to hazardous substance movement.

The exclusion zone is the result of several factors. Many of these factors are dynamic, or subject to change. Once the hot zone has been established, then the boundaries are subject to constant re-evaluation. Since the hot zone is the center of the incident site, then a change in hot zone dimensions can affect the other zone dimensions. Be alert and continue to monitor!

The hot zone begins to take shape as soon as the initial responders detect or suspect the presence of a hazardous substance. Once this hot zone begins to take shape, it becomes important to clearly mark and identify this area to all responders. This zone is now restricted to all personnel unless entry is specifically authorized by the incident commander and the site safety officer. If a small quantity of stable material involved, then traffic cones placed at a safe distance with a firefighter to control entry may be sufficient. Larger areas may require barricades on roadways, brightly colored tape barriers, warning signs, use of natural barriers, or combination of these to identify the area. It is important to isolate the hot zone as soon as possible to protect the public, other responders, and to keep these people from unnecessarily expanding the incident. Vehicles and people traveling through a hot zone create not only an immediate danger to themselves, but spread the incident from the area in which you are trying to contain it. Remember, as the perimeter of the hot zone grows, it will become more difficult to clearly mark and control.

Now that the hot zone is established, a point is established on the upwind side for an entry/exit portal for the hot zone. All entries and exits are made through this portal. The site safety officer, based on the substance and conditions present, will specify a level of protection to be used by all personnel entering the hot zone (Figure 9). The site safety officer must constantly evaluate current site information and may change the required level of protection to meet current site conditions. The site safety officer, or his designate, will provide the security at this portal and restrict access to all personnel who do not meet the following criteria:

1. Are in proper protective clothing.
2. Are utilizing the "buddy system".

3. Are specifically authorized entry to perform a specific task.
4. Are medically fit to perform those tasks.
5. Have the prescribed monitoring and communications equipment.
6. Have the tools and equipment necessary to perform the task.
7. Are marked for individual identification.

Prior to releasing any personnel downrange, the site safety officer:

1. Ensures the decontamination line is in place, staffed, and ready.
2. Ensures that backup personnel are ready in the same level of protection as the entry team.
3. Ensures that EMS personnel are present, briefed, and ready for treatment and transport.

The line around the hot zone is called the "Hot Line". The area outside of this line is the "Warm Zone". The warm zone is also a restricted access area that acts as a buffer between the hot and cold zones. The warm zone contains the contamination reduction corridor, which is the only exit from the hot zone. The size and shape of the warm zone is dependent on the size and shape of the hot zone and the hazards in the hot zone. The "Contamination Control Line" around the outside of the warm zone should also be clearly marked with entry and exit from the cold zone restricted to one point.

Since decontamination of personnel exiting the hot zone occurs in the warm zone, the site safety officer will specify a level of protection for personnel working in the warm zone. The site safety officer (or his designate) will assume a position in the warm zone to control hot zone access, observe operations downrange, observe decontamination procedures, and to check personnel exiting the hot zone for signs and symptoms of exposure. Other personnel present in the warm zone would include personnel assigned to decontamination, the entry team, relief/rescue personnel, zone security personnel, etc. Entry into the warm zone from the cold zone should be restricted to personnel assigned necessary tasks in the hot or warm zone who are wearing the prescribed level of protection. Entry through the cold/warm portal is controlled by

the "Control Officer". The control officer maintains a log of personnel entering and leaving the warm zone to include names, times, purpose of entry, and level of protection. Law enforcement presence for security of the contamination control line is an effective control.

The site safety officer also monitors the conditions in the contamination reduction corridor. With repeated decon, the area containing the decon line may become contaminated. Should this happen, the site safety officer should close that decon area, adjust the hot zone accordingly, and establish a new decon line. This should not be done while personnel are in the hot zone, but between entries.

The area outside of the contamination control line is the "cold zone". The cold zone is a safe area which requires no personal protective equipment and contains the command post, staging areas, and the incident base. Since response personnel are working in the upwind areas of the cold zone, public access to these areas should be restricted to avoid interference with site operations.

Incident command, site development, and site control are all elements necessary to bring any hazardous materials incident to a successful conclusion. The size of the incident determines how complex the U.C.S. structure and site control will be, but the philosophies for safe operation are the same, regardless of the size of the incident. As with any policy or operating procedure; planning, training, and drilling with all potential responders are the keys to an effective hazardous materials response.

December, 1994  
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